

YEAST SOLUTIONS

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MAINTAINING STRONG HERD PERFORMANCE...

Andrew Williams (pictured) and his wife Elaine have been farming at The Stocks Farm, in Welshampton, for the last fifteen years. Together, with the help of their son and two fulltime members of staff, they run a 150 strong dairy herd, providing milk to Muller Wiseman on a non-aligned contract.

The farm milks twice a day, with average milk yields standing at 10,500 litres/cow, with butterfats at 3.71 per cent, protein at 3.4 per cent and a rolling cell count of 133. The farm rears its own replacements, with calving taking place all year round.

“We look to turn our cows out to grass in mid April,” explained Andrew, “But they always come in at night, largely so that I can keep an eye on them and make sure that they are eating enough.”

During the spring and summer grazing months, cows are buffer fed 5.5 kg/cow of blend in the evening, along with a source of rumen-protected fat, a home grown forage mix and 350g of Bespoke Minerals supplied by HJ Lea Oakes. These minerals also contain Actisaf live yeast, which was recommended by HJ Lea Oakes adviser, Philip Jackson, to help reduce the risk of acidosis, improve rumen performance and promote improved feed efficiency.

“The cows are receiving the recommended

level of Actisaf through the mineral supplement,” continued Andrew. “We also feed the cows dairy nuts from HJ Lea Oakes in the parlour to help further promote improved performance.”

Cows come indoors full-time from October onwards and are fed lucerne and a 60:40 split of grass and maize silage. Whole crop wheat is fed to plug the gap between maize harvesting and to allow time for fermentation in the clamp, with maize silage usually ready for consumption in December.

“We feed our cows a lot,” stated Andrew, “but they are comfortable and producing decent yields, so we are happy to carry on doing so. The addition of Actisaf seems to work well and ensure that rumen performance is stable and working as effectively as possible, despite high intakes.”

Andrew grows all of his own forage on which the farm is very dependent and, whilst quality inevitably differs year on year, Andrew is confident that the impact of any variation can be minimised.

“By having a product like Actisaf in my feed, it gives me peace of mind,” he explained. “If there is variation in sources of forage and silage, I know that the rumen function of



my cows is being stabilised so that they can cope with any inconsistency in the diet.”

Overall, Andrew is happy with the performance of his herd and is wary of changing anything nutritionally that may alter this.

“If a product is working well, then I will keep using it,” he concluded. “Across the board, herd health, performance and fertility is doing well and I think that Actisaf plays its part with helping all of these things. It’s good value for money and provides a good return on investment.”



OPTIMISE FEED EFFICIENCY THROUGH COW COMFORT AND SUPPLEMENTATION WITH LIVE YEAST...

With low milk prices set to continue through this winter and into next spring, optimising feed efficiency within dairy herds will be crucial if producers are going to maintain a margin over feed costs.

The last edition of *Yeast Solutions* examined the essential elements of feed and feeding protocol required to ensure maximum feed efficiency. This month, we investigate how housing, herd management and Actisaf supplementation can also help dairy producers optimise their milk returns from

Cow housing

Poor cubicle comfort has a significant impact on herd performance, as cows will spend less time lying down chewing the cud. There is a clear positive correlation

between longer cow lying times and milk yields, as blood flow to the cow's udder increases the longer she stays lying down. Getting the length and width of cubicle beds right is therefore vital, and it will vary from breed to breed. Generally for a Holstein x Friesian, cubicles should be 2.43m long by 1.22m wide. If you are seeing cows standing and perching with their front legs on a cubicle bed it is a good indication of poor comfort.

Overstocking is another issue, with overstocked sheds leading to bullying and stress, resulting in lower feed intakes and reduced milk yields. It is usually new members of the milking herd that suffer the most, particularly heifers. Buildings should ideally be stocked at 85 cows per 100 cubicles and each cow should be

provided with at least 65cm of space at the feed barrier. A simple rule of thumb is to have 2 rows of cubicle beds per bay of head feed space.

It is important that feed barriers are set at the right height for different breeds, as barriers that are too low will deter cows from spending time at the feed barrier.

Adequate lighting of at least 300 lux for 18 hours of the day has been shown to aid feeding rates and drive intakes, and good ventilation is also important to create a healthy housing environment. Shed design should ensure that fresh air is drawn in from the ventilated sides of the building and pushed up and out through an open ridge in the roof. This ensures that fresh air is constantly circulating

through the building, reducing levels of condensation, increasing cow comfort and minimising the risk of pneumonia.

Keeping stressful activities to a minimum in the milking herd also contributes to optimal feed efficiency, as stress diverts energy away from milk production.

Monitor what your cows are telling you

Cows should be closely monitored to ensure that herd management is delivering the desired results, and creating an environment in which cows are producing the maximum amount of milk from feed intakes.

If you see cows lying down in their cubicles, chewing the cud, with strong, vigorous jaw movements for more than 10 hours per day then that is a good indication that diet and housing environment are correct. At any one point in time more than 60 per cent of the herd should be lying down ruminating in a cubicle bed, with all other cows eating or drinking water.

Monitoring dung consistency and composition will also help assess rumen performance. Undigested fibres and grains are indicative of inadequate rumen function, potential acidosis or poor cereal processing, all of which mean cows aren't getting the most from their feed.

Rumen fill can also be assessed by viewing the triangular area behind the last rib on the left hand side of a cow. When viewed from behind this area should appear full, three to four hours after milking. Assume that if it is not, environmental factors or feed need to change to encourage better feed intakes.

Abrasions on a cow's hocks and legs can indicate poor cubicle design and bald patches on the neck can signify a feed barrier that is too low and likely to be restricting feed intakes.

Actisaf live yeast

Feeding for marginal litres is unlikely to provide a return on investment this winter, with the milk price to feed ratio being too close.

However, supplementing feed with Actisaf yeast will provide a good return on investment, with peer-reviewed research demonstrating that Actisaf consistently improves feed intakes, stabilises rumen pH and aids the prevention of acidosis - all of which will help improve feed efficiency. Actisaf has been proven to deliver up to three litres of extra milk in early lactation cows, and even if it were to provide only one extra litre, supplementation would still provide a 3:1 return on investment, based on current milk prices.

The rumen of a modern cow contains oxygen that is highly toxic to rumen microbes, particularly those that digest fibre. Actisaf lowers the oxygen level in the rumen, allowing rumen microbes to grow and digest more fibre at a faster rate, aiding energy production.

Actisaf stimulates these microbes to work harder and faster. This is beneficial for high yielding cows with high feed intakes, as rumen microbes do not normally have the time required to digest large intakes of feed properly.

Live yeast also helps to neutralise rumen acidity and maintain a stable rumen pH, thereby preventing acidosis. This rumen stability also aids feed transition, particularly when cows are initially housed off grass or changing between clamps of forage and other dietary ingredients.

Feed efficiency is a complex subject that is influenced by a large range of interrelated factors. Feed composition and consistency, good cow management and careful observation are key management factors that will help to ensure that a herd maximises feed efficiency this winter. It is also worth feeding Actisaf live yeast to maximise fibre digestion from forages and promote a stable rumen environment, both of which are essential if optimal feed efficiency is to be attained.

Top five management tips to improve feed efficiency...

1. Get your forage analysed and balance the diet accordingly
2. Don't overstock sheds and ensure adequate ventilation
3. Ensure a minimum of 65cm of barrier feed space/cow
4. Gradually introduce new feeds/clamps of forage - ideally over 2 week period to minimise disruption
5. Maintain consistency in the diet formulation and how it is mixed and fed





LIVE YEAST MAINTAINS GOOD RUMEN HEALTH WHILST DRIVING INTAKES...

Good performance and good rumen health go together according to dairy farmer, Adam Sill. Adam runs Ash Tree Farm near Ashbourne in Derbyshire, where he milks 260 high yielding pedigree Holsteins three times a day, giving an average yield of 11,300 litres.

With milk supplied to Arla, Adam is keen to maintain milk solids as well as yield, as his milk contract rewards constituents. Current performance sees him averaging 3.83 per cent butterfat and 3.18 per cent protein, from cows averaging 36 litres/day at an average of 170 days in milk.

“We house our cows all year round and really drive intakes so that we get good performance, condition and health,” Adam explained. “All cows get the same TMR ration, which is set at M+28 for the cows and M+24 for the heifers, and then they are supplemented through out of parlour feeders at 0.4kg feed/litre of milk above the TMR.”

This approach makes day-to-day feeding

a simple job, although it is not without its complications, Adam explained. “The issue with feeding the same ration to all the cows is that late lactation cows do carry a bit more condition and, whilst still well under the national average, we get a few more LDAs than I’d like, but we’ve got to weigh this up against the complexity of rationing the cows.”

The outside ration consists of grass silage, maize silage, straw, wheat distiller syrup, soya hulls, bread, rapeseed meal, a blend of fats, urea and premium minerals. The other key ingredient is Supersaf live yeast, developed by Advance Sourcing and based on Actisaf live yeast.

“We add Supersaf to help us maintain good rumen health whilst driving intakes,” said Adam. “Our nutritionist, David Levick from Kite, recommended it, and it helps us avoid acidosis and increase forage intakes to maximise production. As soon as we first introduced it, we were able to take out the other buffers that we used to feed, and the cows are doing really well with no hint of

acidosis or digestive upset, whilst we are seeing a cost saving. What’s more, this has saved around 300g of valuable space in the rumen for other ingredients that have a feed value rather than buffers, which do not.”

“Ration cost is an area that has been quite interesting,” Adam said. “Like all dairy farmers at the moment we are constantly examining our costs and we did actually decide to take the Supersaf out of the ration for a while to save money. What we found was that quite quickly cows were on a knife-edge, with symptoms of acidosis, and so we put it back in and we’ve been pleased with the positive impact that it has on the cows.”

Adam is looking to grow the herd and is currently in the process of extending his housing so that he can take cow numbers up to around 300 in milk. “Whilst the current milk price isn’t great I have seen good results from using the Supersaf and I will continue using it in the TMR as we grow the herd – it certainly delivers!”



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