## **YEAST**SOLUTIONS

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## CALF PERFORMANCE IMPROVES WITH ACTISAF & SAFMANNAN...

The inclusion of Actisaf and Safmannan in the calf diet at Little Hook Farm in Haverfordwest, South Wales has contributed to significant young stock improvements. Dan Evans farms in partnership with his parents, Malcolm and Jane, on the family's 200-acre dairy farm, with additional rented land. Their 300 Holstein cows graze outside from April to October and yields stand at 10,000 litres rolling average, with butterfat at 4.1% and protein at 3.2%.

But it's calf health that is the real success story at Little Hook Farm, and the last three years have seen some tremendous improvements, some of which Dan attributes to the addition of a calf bucket containing Actisaf and Safmannan into the calf diet. The combination of Actisaf live yeast and Safmannan premium yeast fraction is designed to support gut health in young calves at a time when they are very susceptible to gut infections.

"We knew we could be doing better with our young stock in terms of health and performance", says Dan. "Historically, we were getting some issues with young calves scouring and we needed to address this. What's more, our age at first calving was around 27 months, which we knew was too high and was costing us extra money in terms of additional rearing costs."

A new calf building was put up on the farm three years ago, and calves are now housed in deep bedded straw pens with igloos. At the same time the farm also switched to an automatic milk feeder for the heifer calves. "We saw a big improvement following the move to the new building and the introduction of the automatic feeder," says Dan. "The new housing makes it much easier to group our calves, and the milk feeder ensures accurate feeding whilst freeing up our time to manage the youngstock better," explains Dan.

Calves are fed six litres of milk replacer per day, at a rate of 150g per litre. Dan made the decision to add Actisaf and Safmannan to the milk replacer to help to support the immune system and bind pathogens, and they are each included at a rate of 1g per head per day. Growth rates are monitored with a weigh band and once calves reach around 55 days, and visits to the calf feeder reduce, they are weaned over a week to ten days.

"Calves appear much healthier and intakes are good from birth, and we've seen no further cases of calf scour, which can only be a good thing," explains Dan. "Changes to the calf diet, coupled with closer management and improved housing, have seen us bring our age at first calving down to 23 months."

Mathew Van Dijk, the farm's feed advisor from Bibby Agriculture, adds; "Calves certainly look healthier this year, and we're really pleased with what we've seen since we started using the calf bucket containing Actisaf and Safmannan."

"Overall, we're delighted with the positive results we've seen with the Actisaf and Safmannan and, as we look to keep improving the performance of our herd overall, we'll certainly be keeping them in the diet," concludes Dan.



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### SUCCESSFUL HEIFER REARING - FOCUS ON THE PERIOD FROM BIRTH TO WEANING

#### Introduction

Heifer rearing costs represent the second highest cost on dairy farms after feed, with costs amounting to up to 20 per cent of total milk production costs.

It is now widely accepted that calving at between 22 and 24 months of age reduces rearing costs and results in greater lifetime performance and reduced metabolic issues at calving, and so this should be your goal. The challenge is how to reliably achieve this, and the period from birth to weaning is seen as critical in a heifer's development.

#### Pre-weaning management - Growth rates are essential

The target is for calves to double their birth weight by weaning at 8-10 weeks of age. For a 45kg calf at birth, this requires a growth rate of 0.80kg per day to reach a weaning weight of 90kg after 8 weeks. Farmers should adopt a policy of weighing calves at birth and periodically during the pre-weaning period so that they can measure their calves' performance. Investing in a weigh crate or tape and getting into the habit of regularly monitoring calves will be money well spent.

#### Colostrum - Quality, quantity, quickly

Probably the most important part of calf management is getting quality colostrum into calves quickly and in the correct quantity.

- Test colostrum before use using a Brix refractometer.
- Do not pool colostrum.
- Feed colostrum with more than 50g/litre of IgG at a rate of 10 per cent of the calf's bodyweight within 4 hours after birth, to achieve a minimum of 10g/litre of IgG in the calf's plasma by 24hrs after birth.
- Typical feed rates are 4-5 litres per calf but will depend on IgG content. Feed colostrum as soon as possible after birth as IgG absorption rates reduce by 60 per cent 6 hours post birth.

- Don't let calves suckle their mother as there is no way of knowing the quality or quantity of colostrum consumed, and there is a risk of contamination from dirty teats.
- Feed colostrum from calf's own dam if quality is good enough and the disease status of the dam is ok.
- Good hygiene should be followed when managing colostrum to avoid pathogenic infection and colostrum should not be left in buckets around dairies or calf sheds for extended periods of time as this heightens the risk of contamination.

#### Milk replacer

It is important to promote high rates of daily gain with milk replacer early in life but also not to over-feed as it can reduce or delay starter feed intakes, which are vital for rumen development.

- Current recommendations are to feed 6 litres of milk per calf per day, containing 125g 150g of milk powder/litre.
- A 45kg calf requires approximately 380g of milk replacer (3 litres fed at 125g/litre) for maintenance alone, with any additional milk intake being utilised for growth.
- As an easy rule of thumb, provide 1.5 per cent of bodyweight as solids during the first week of life, increasing to 2 per cent of bodyweight from the second week of life until the week before weaning, when one feed is dropped.

#### Starter feed intake and chopped forages

It is vital to promote early intake of starter feed to physically and microbially develop the rumen so that the animal can start to digest fibre as soon as possible.

• Promoting high rates of starter feed intake is essential to produce Volatile Fatty Acids (VFAs), which are the result of rumen fermentation of carbohydrates. These VFAs, and specifically propionic and butyric acid, are vital for the development of the rumen papillae, which are essential for nutrient absorption from the rumen.



- Fresh starter feed should be fed daily and target 300g of starter feed intake by 3 weeks of age, of a feed that contains a high percentage of starch from cereals (from balanced sources of digestibility and degradability), high quality protein (with good levels of UDP) and low digestible fibre.
- In addition, current recommendations are to feed a source of forage as 4 per cent of total solid feed intake, chopped to 2.5cm and containing >65 per cent NDF (e.g. chopped hay or straw) as this promotes muscular development of the rumen thereby facilitating higher intakes of starter feed. A source of chopped forage will also aid rumination which will contribute to raising rumen pH above pH 6.0 and it also acts like a tooth pick for the developing rumen papillae
- The weaning process should start when the calf is approximately 45 days old and should involve gradually reducing the volume of milk fed daily, which should promote increased intake of starter feed. A typical recommendation is to wean Holstein calves once they are consuming 2kg of starter feed per head per day for three consecutive days.

#### Actisaf

Including Actisaf Sc47 protected live yeast in the ration provides significant benefits to calves during the pre-weaning stage. Through its mode of action, Actisaf reduces trace levels of oxygen in the rumen and creates an environment where the main cellulolytic bacteria will grow and thrive, thereby improving fibre digestion when it is already challenged by low rumen pH and enhancing the development of the core ruminal microbiome.

Actisaf also eases the transition on to starter feed, as it conditions the rumen microbes for the change in diet by biologically buffering the rumen and promoting a higher rumen pH through the stimulation of lactic acid-utilising bacteria. These bacteria reduce the build up of lactic acid in the calf's rumen, which reduces the incidence of digestive upsets such as acidosis, which can greatly impact on feed digestion, rumen development and calf growth rates.

#### Safmannan

Feeding Safmannan, which is a premium yeast fraction, can prove beneficial to calves, and is particularly pertinent with the increasing focus surrounding antibiotic usage and subsequent resistance in calves.

Bouts of calf diarrhoea and respiratory disease such as pneumonia in the first 3 months of life have been shown to reduce heifer growth rates and to be detrimental to first and subsequent lactation yield of heifers when they enter the milking herd. Therefore, management and nutrition of the calf early on in life has long term implications and performance in the first three months of life can have a major bearing on first lactation performance of the heifer in the milking herd.

Safmannan is manufactured from unique strains of yeast under extremely consistent manufacturing conditions. Beta glucans and mannans - the functional properties of Safmannan – help support the immune status of calves, thereby supporting the defence mechanism to on-farm challenges. Safmannan can bind to pathogenic bacteria, which can result in reduced pathogen pressure for the young, vulnerable animal.

## **SUMMARY**

- Heifer rearing costs are the second highest cost on dairy farms after feed
- Target to double birth weight by weaning at 8-10 wks.
- Feed high quality colostrum quickly IgG of more than 50g/litre at a rate of 10 per cent of bodyweight within four hours
- Promote high rates of daily gain with milk replacer and starter feed
- For best results, feed Actisaf and Safmannan in your calf milk replacer and starter feed



# Give your calves the best start in life with Actisaf and Safmannan

Feeding Actisaf live yeast to your calves contributes to:

- Improved FCR and live weight gain
- Greater digestion of fibre
- Reduced risk of acidosis

Feeding Safmannan premium yeast fraction helps:

- Support the immune status of calves
- Bind harmful, disease-causing bacteria



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