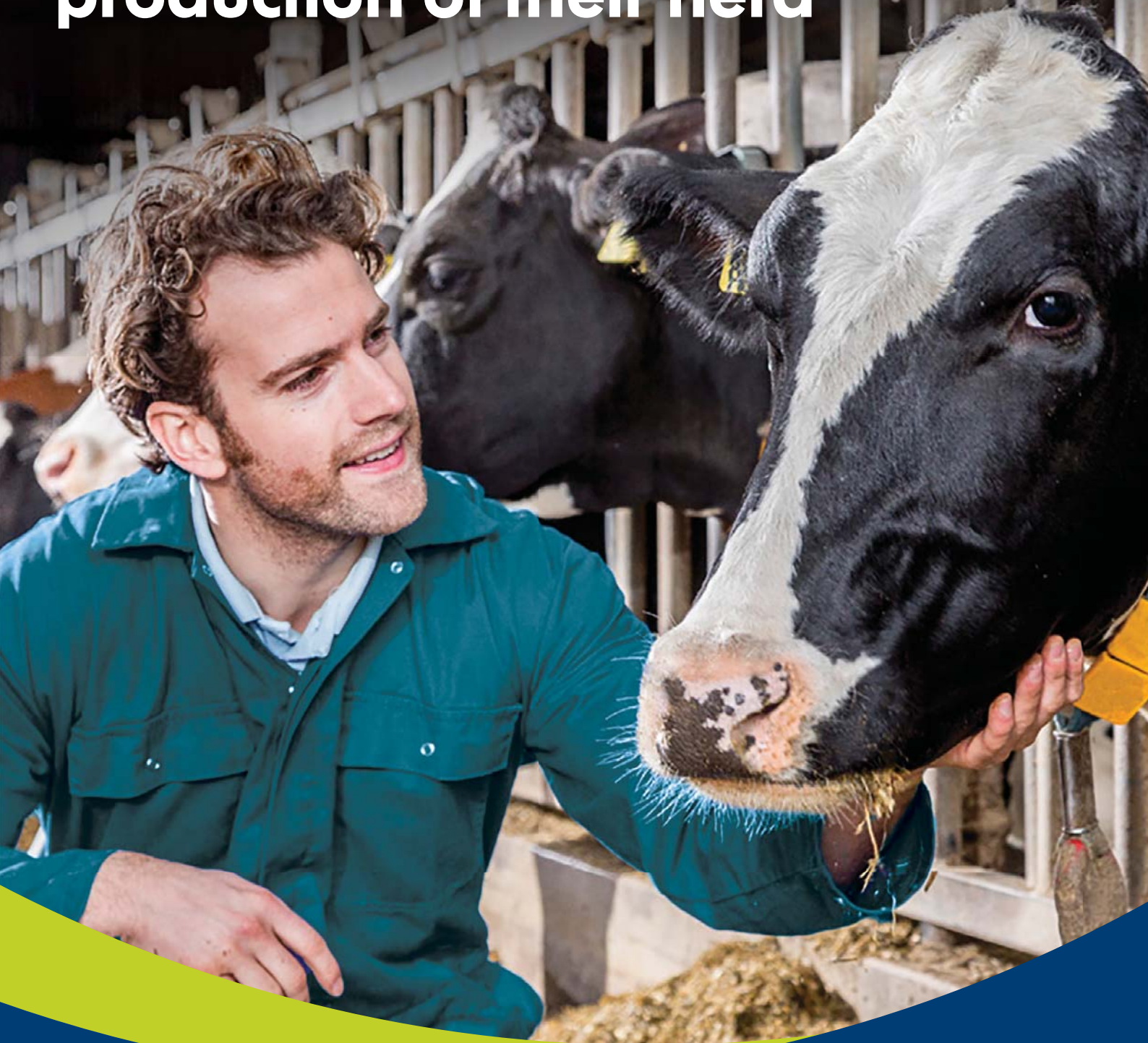


For progressive farmers looking to improve the milk production of their herd



Feeding dairies towards a profitable future

To become more efficient and sustainable, farmers need to use the full production potential of each cow. Only this will keep production costs per litre of milk as low as possible. Feed costs are a large proportion of the costs per litre of milk produced. This is why improving the milk production by increasing feed efficiency will have a considerable effect on sustainability of dairy farming and on the income of any dairy farmer.

The importance of hindgut health

In the period immediately after calving, there is a strong increase in the amount of rapidly fermentable carbohydrates in the diet of modern dairy cows. It is common knowledge that if cows are fed high levels of these carbohydrates, this can result in sub-acute rumen acidosis (SARA), resulting in a poor transition to lactation.

More recent evidence suggests that feeding high amounts of carbohydrates can have an equally strong impact on the fermentation processes within the hindgut. In fact, signs that are typically attributed to SARA, like for example loose and frothy faeces or mucin casts, are actually signs of hindgut acidosis.¹ Lactate production as a result of hindgut acidosis has a negative influence on the gut barrier, resulting in “leaky gut”. As a result of leaky gut, inflammation processes occur and energy required for milk production is being used to deal with these inflammation processes.² This will lead to a reduced amount of energy available for milk production.



Selko® LactiBute

For decades Trouw Nutrition scientists have worked closely with top nutritionists throughout the world to optimise ruminant animal diets by lowering feed costs and increasing milk yields.

LactiBute is the result of years of systematic research^{3,4,5,6,7} and has been tried and tested on many different farms from all around the world. It is a patented product, with a unique mode of action,² that reduces the effects of leaky gut, leading to an improvement of energy partition.

LactiBute contains matrix encapsulated gluconate, which has been shown in multiple species to promote the conversion of lactic acid into butyrate. A correct balance of lactic acid and butyrate in the hindgut is important, because butyrate:

- Strengthens the gut barrier
- Reduces inflammation in the gut
- Inhibits pathogenic bacteria
- Is an energy source for cellular metabolism

Increasing milk production by 0.85-1kg per day!

A healthy intestine is more efficient at absorbing nutrients in the diet, supporting higher levels of productivity. Adding LactiBute to the ration therefore increases milk production while increasing fat and protein levels at the same time. This results in an increase of Energy Corrected Milk of 0.85-1 kg per head per day.

Trials carried out with Selko LactiBute

Trials were carried out on research^{8,9,10} farms and on commercial farms. The purpose of these trials was to test the effect of Selko LactiBute on energy partitioning, feed efficiency, milk yield and milk solids produced.

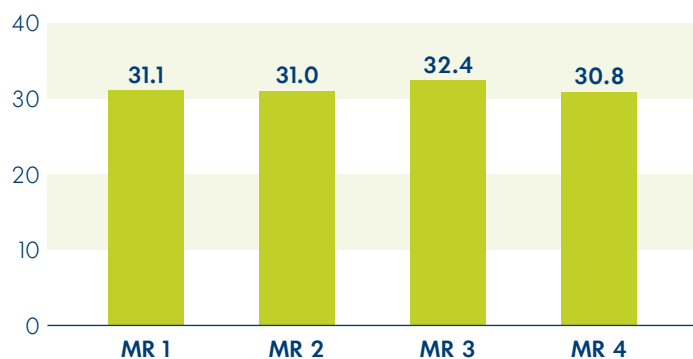
Material and methods

A total of 450 cows were included in the trial averaging 12,500 Litres/year. Cows were on a one group TMR system housed all year round. Milk recording data was gathered for four months pre-trial and used as the baseline for the comparison. Cows were then fed 16g/h/d of LactiBute mixed in to TMR. Diets were formulated to the same nutrient levels throughout the trial period to avoid any effect from energy. For the purposes of this trial we concentrated on cows within the fresh period 0-100 DIM.

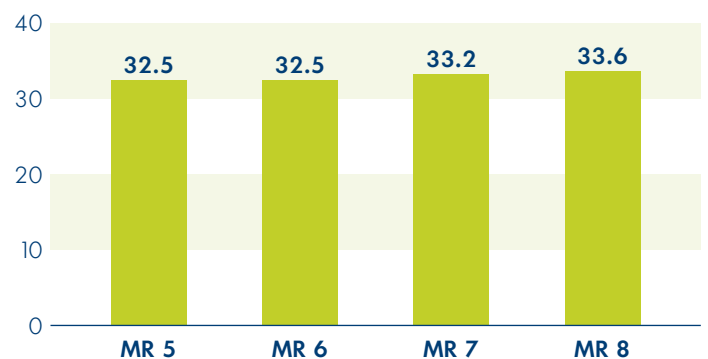
Results

Milk fat, milk protein and milk yield increased considerably between the control and trial periods. Average gain of 1.5kg of Energy Corrected Milk.

**No LactiBute 0-100 DIM
Energy Corrected Milk (kg)**

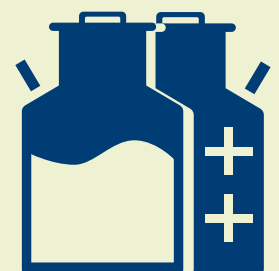


**LactiBute 0-100 DIM
Energy Corrected Milk (kg)**



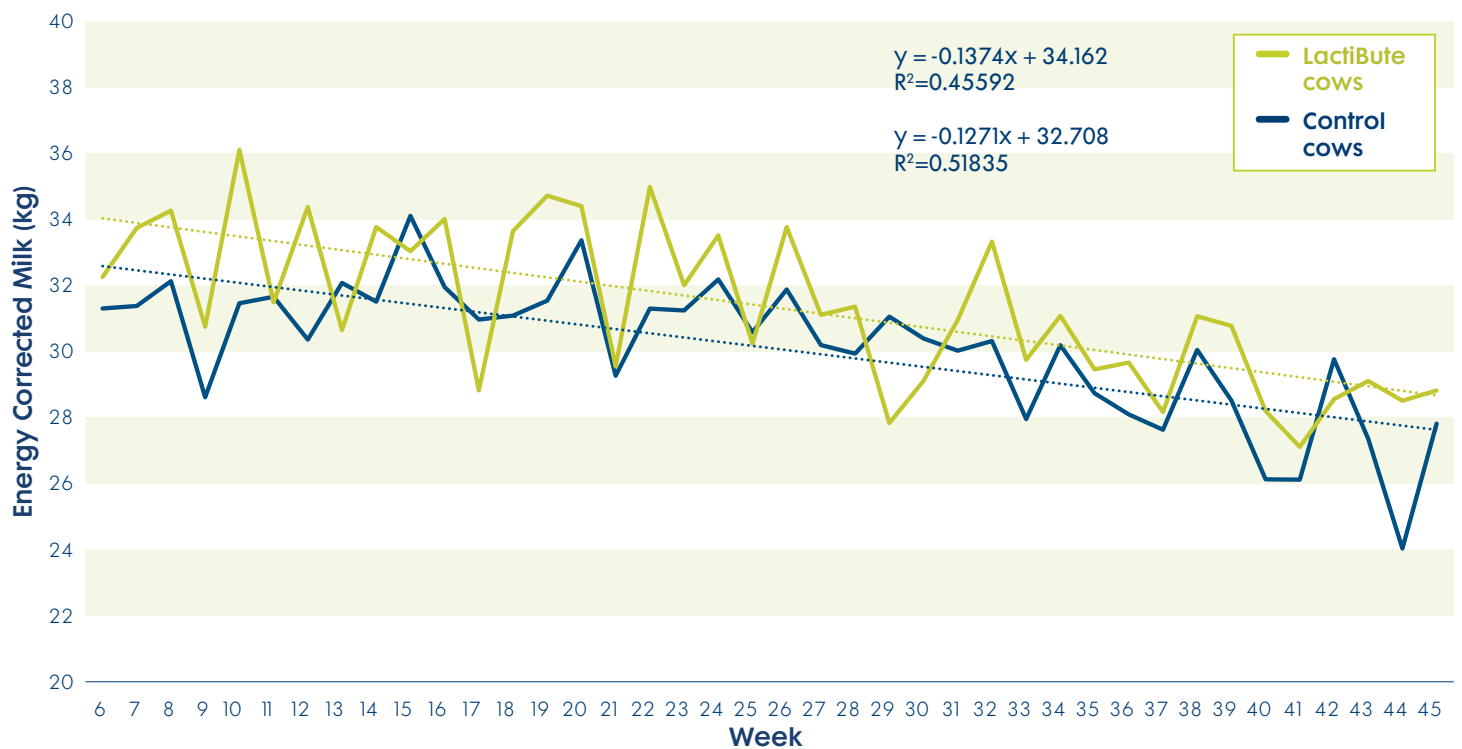
Conclusion

Milk fat, milk protein and milk yield all increased as a result of supplementation with LactiBute, leading to considerable gains in energy corrected milk and a 3.5:1 ROI.





Using milk recording data and days in milk we were able to plot lactation curves for the trial and control periods. LactiBute fed cows (shown in green) show an average increase of 1.5kg ECM/day throughout the entire lactation period.



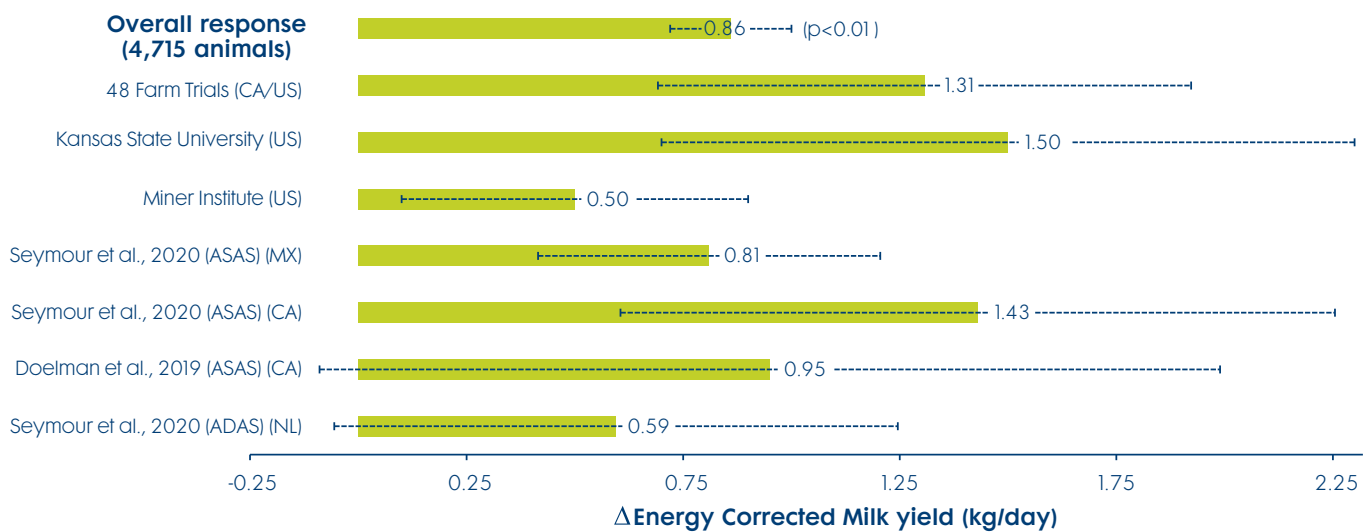


Trial summary

Over a period of 3 years we have conducted numerous trials on research units and commercial units across the globe.

The graph below shows a summary of these results, with a total of 4,715 individual cow data points shown. Throughout these trials LactiBute has significantly increased Energy Corrected Milk yielding a highly significant ($p < 0.01$) average response of 0.86kg ECM/cow/day, with a range in increase from 0.51-1.5kg ECM/cow/day.

95% confidence interval: 0.51-1.5kg ECM/day



Ruminant Research Centre, Trouw Nutrition R&D.



Selko LactiBute

The product choice for progressive farmers looking to improve milk production.

LactiBute has been shown to improve hindgut fermentation and to reduce the risk of leaky gut.²

Adding LactiBute to the diet of your cows will increase the production of energy corrected milk by 0.85-1kg per day, thus maximising your profits. It has been tested and tried on farms from all over the world.^{8,9,10} Based on the experience of others we can offer you peace of mind because we know what result you should expect from the cows on your farm.

Dosing schedule

- Feed LactiBute during the whole lactation at a dose of 16 grams/cow/day.
- Where LactiBute is mixed in TMR, add 16 grams per animal per day to the TMR.
- Where LactiBute is included in compound feed, mix 0.2% into compound feed.



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Trouw Nutrition is a global leader in innovative feed specialities, premixes and technical services for animal nutrition. Quality, innovation and sustainability are the guiding principles behind everything we do – from research and raw material procurement, to the delivery of cutting-edge products and services for agriculture.

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