

Practical guides Sustainability series



LifeStart

Feed More Energy for a more sustainable herd

Fat inclusion levels and composition are crucial to calf development

LifeStart Science research demonstrates that fat inclusion and composition is crucial to calf development. Fat provides dietary energy and essential fatty acids, which have important structural and metabolic functions in newborn animals. Fat is also associated with gut health and the stimulation of suckling activity.



It is therefore essential that the macronutrient profile of calf milk is optimised to deliver a balanced and digestible liquid feed, just as mother nature intended.

Fat inclusion levels

Research that underpinned the introduction of Energized Calf Milk in 2018 shows that higher fat inclusion in milk replacers to more closely align with cow's milk brings multiple benefits:

- Reduced pre-weaning mortality¹
- Improved health in terms of faecal consistency²
- Reduced therapeutic interventions³
- Greater gastrointestinal development⁴
- Reduction in hunger related behaviours, thereby enhancing calf welfare⁵

References:

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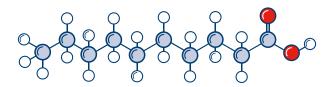


Fat composition

The latest research shows that supplementing milk replacers with fatty acids found in milk fat but missing from the vegetable sources used in many milk replacers, can help improve gut development and reduce scours. Vegetable based fats are missing the shorter chain fatty acids, meaning the overall fat is unbalanced and deficient compared to cow's milk.

Essential fatty acids

Fatty acids are the building blocks of fat. There are 400 different fatty acids in bovine milk which makes it the most complex of all the natural fats. Whilst fat inclusion is crucial to provide dietary energy, the balance of individual fatty acids impacts important structural and metabolic functions in newborn animals.



These shorter chain acids have been shown to bring multiple benefits to the calf. Most significantly they play a key role in the development of the rumen and gastrointestinal tract, helping make calves more resilient and less prone to scours. LactoFat Pro is a patent-pending technology that allows the inclusion of some of these short chain fatty acids without the traditional issues of palatability and smell associated with existing methods.



Reducing carbon footprint

Investing in early life nutrition, through Feeding More Energy, improves calf health and performance. The long-term impacts of having healthier, more productive animals that achieve a higher number of lactations are to reduce the carbon footprint of milk by having fewer replacements, a lower age at first calving and a higher lifetime daily yield.

