

# Why ActivEase® Green Lipped Mussel consistently delivers clinically proven results

Supplements containing Green Lipped Mussel (GLM) are becoming increasingly popular but not all GLM is of the same quality, so paying particular attention to quality is critical. Over a decade of research and £1M R&D investment has gone into the development of ActivEase®, the proprietary Green Lipped Mussel extract used in Lintbells' products.

## DELIVERING CLINICAL PROOF

Over the last 40 years, circa 150 publications have been written on the health benefits of GLM. From the wealth of scientific literature available, it is easy to pick examples of poor studies, or studies using low doses or poor quality GLM. However, a number of well-designed double blind, placebo-controlled studies have been conducted in dogs and cats (Bierer & Bui, 2002; Bui & Bierer, 2003; Hielm-Bjorkman *et al*, 2013). For those interested, a broader review of the literature has recently been published (Eason *et al*, 2018).

The scientific understanding provided by Bierer & Bui was used in the early development of the composition and processing standards required for ActivEase® GLM. The subsequent double blind, placebo-controlled, crossover study conducted by the Royal Veterinary College (data on file) further cemented those standards, ensuring that ActivEase® GLM can consistently deliver.



## ENSURING CONSISTENT RAW MATERIAL QUALITY IS FUNDAMENTAL

Lintbells has invested a million pounds over the last ten years to deepen the understanding of the chemical composition and associated health benefits of Green Lipped Mussel, and perfect the sourcing and processing of GLM to produce ActivEase®. As a result of this investment, Lintbells has become a GLM world expert. By thoroughly understanding the chemical composition and processing of GLM extracts, it has enabled us to achieve the outcomes shown in our RVC clinical study.

“ Over a decade of research and £1M R&D investment has gone into the development of ActivEase® Green Lipped Mussel. ”



A detailed understanding of GLM is needed to be able to source the best quality raw ingredient. We only source GLM from farms with a consistent quality record and can fully trace all batches back to individual growing locations and harvest dates. The local environment, including details

such as tidal nutrient flow, geographic location, the genus of spat (juvenile mussel) used and the time of year influences the optimal time of harvesting for maximum quality. Understanding these details, and the impact they have on the quality of the final product, results in ActivEase® delivering a consistently high and stable essential fatty acid profile.

“ We perform full fatty acid profiles, looking at over 40 individual fatty acids, lipid class analysis and oxidative stability on each individual ActivEase® batch. ”

## MAINTAINING QUALITY STANDARDS ON A DAILY BASIS

The attention to detail, that starts with sourcing, continues with our unique processing method.

The raw product is stabilised before undergoing a very rapid vacuum-drying process reducing the mussels to powder in less than sixty seconds. Starting with a high-quality ingredient and low temperature, rapid processing results in a product with significantly higher levels of omega 3 fatty acids compared with those found in other GLM powders.

We perform full fatty acid profiles, looking at over 40 individual fatty acids, lipid class analysis and oxidative stability on each individual ActivEase® batch produced on a daily basis to ensure that the fatty acid profile is always equal to or above that used in our RVC clinical study.

## PUSHING THE BOUNDARIES OF RESEARCH

Lintbells continues to invest significantly in furthering the understanding of Green Lipped Mussel. Through a number of research collaborations, a full suite of bioactivity analyses is enabling a far greater understanding of the mechanisms of action, enabling the introduction of product enhancements and directing future research in the field.

Furthermore, additional clinical studies are being conducted with globally recognised veterinary schools to enable further correlation between Green Lipped Mussel composition and clinically valid outcomes in companion animals.

## References:

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Bui, L.M.; Bierer, T.L. *Vet. Ther.* 2003, 4, 397-407  
Eason, C. T., Adams, S. L., Puddick, J., Romanazzi, D., Miller, M. R., King, N., Packer, M. A. *Vet. sciences* 2018, 5(2), 36  
Hielm-Bjorkman, A.; Roine, J.; Elo, K.; Lappalainen, A.; Junnila, J.; Laitinen-Vapaavuori, O. *BMJ Vet. Res.* 2012, 8, 157

