Aromabiotic fulfils where antibiotics fall short

Udder health is of major concern in the world-wide dairy industry. In the first place because high somatic cell counts in milk are associated with lower milk quality and thus lower milk prices are paid. Secondly clinical mastitis cases lead to direct and indirect production losses because of rejected milk and lower overall performance. Less known is the fact that subclinical mastitis, being an elevated somatic cell count, induces production losses up to as much as 9,5%.

Antibiotics are used widely against mastitis, but only with limited success. Uncertainty on the exact type of pathogen present and the upcoming and unavoidable resistance of pathogens against antibiotics make that not every treatment with antibiotics is effective.

In contrary, the animal's immune system is able to deal with many different pathogens for a lifetime, without any risk of pathogens becoming resistant to the mechanism. So why not just boost the natural immune system of the animal? The immune system is an energy-consuming mechanism, especially when for instance the somatic cell count is elevated. A more functional immune system will result in better health, lower somatic cell counts and thus in better performance of the animal because the energy that will be saved.

aromabiotic cattle

Improving milk and blood neutrophil quality

The Nuscience-solution to boost the ruminant's immune system is Aromabiotic Cattle Medium Chain Fatty Acids (MCFA). One feature that medium chain fatty acids have, and what in antibiotics are lacking, is the positive effect on neutrophil quality.

Nuscience has evaluated the effect of Aromabiotic Cattle MCFA on Mastitis and Milk Quality Research Unit of the Faculty of Veterinary Medicine of Ghent, the effect of orally administrated on the viability of the neutrophils in blood and milk on dairy cows after parturition was tested.

Neutrophil viability showed to decrease dramatically at the moment of calving compared to 8 weeks before calving in the control group (figure 1), demonstrating the immunosuppression of the cow around calving. Aromabiotic Cattle MCFA show to reduce the immunosuppression after parturition and thus increase the neutrophils' capacity to search and destroy bacteria inside the mammary gland in early lactation.

Numerous field studies have shown the positive effects of Aromabiotic Cattle MCFA on somatic cell count and the frequency of new udder infections. The better functioning immune system of the dairy cow and other production animals allows to reduce the use of antibiotics. In conclusion: Animal performances can be improved, while the risk for antimicrobial resistance can be reduced!

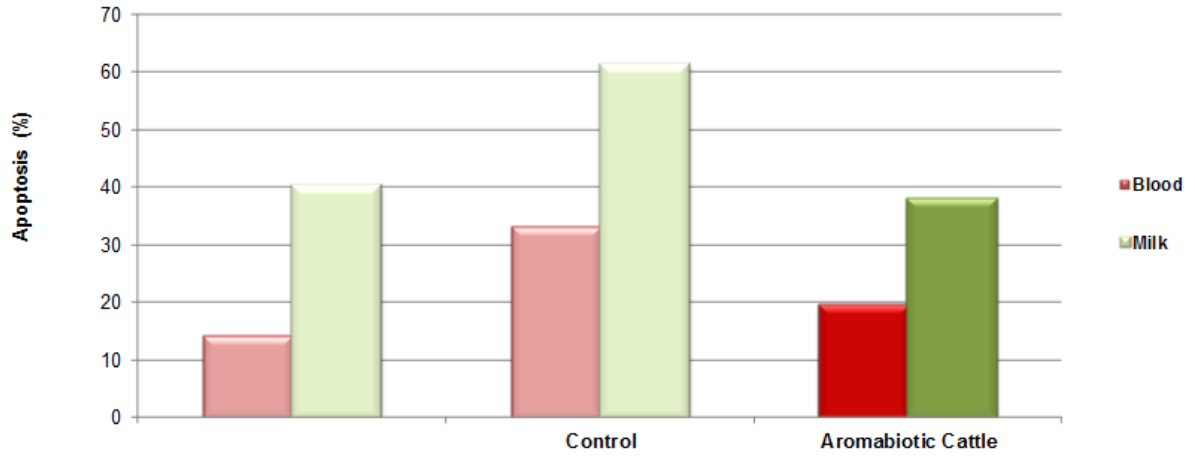

Figure 1. The viability of blood and milk neutrophils after calving compared to 8 weeks before calving, expressed as the percentage of neutrophils in apoptosis. Apoptosis is direct and inversely related to the viability of the neutrophils. Aromabiotic Cattle MCFA show to reduce the effects of immune suppression around calving.