

## Aromabiotic fulfils where antibiotics fall short

Worldwide, there is a clear demand to reduce the antibiotic use in piglets and in this way reduce the risk for antimicrobial resistance. Medium chain fatty acids are well known to exert **excellent antimicrobial properties**. The minimal concentration of medium chain fatty acids needed to inhibit microbial growth is much lower than for other acids. For this reason they are used for a long time as alternative to antibiotics in piglet nutrition. However the **properties of medium chain fatty acids go far beyond their antimicrobial effect**. Medium chain fatty acids feature other benefits like reducing virulence of pathogens, improving intestinal morphology and improving immune function of animals. In this way the use of medium chain fatty acids has beneficial effects over the use of in feed antibiotics, and even add-on effects when they are used together.

# aromabiotic®

### Improving intestinal and general health

One feature that medium chain fatty acids have, and what in feed antibiotics are lacking, is the positive effect on neutrophil quality. This **affects not only the intestinal, but also the general health of the piglets**. A healthy neutrophil population is very important to fight off the different infections around weaning. Around weaning not only digestive problems, but also respiratory problems and streptococcus infections threaten the piglets. Especially in this period piglets are vulnerable, because they lose the passive immunity derived from the sow milk. On top of this they encounter a lot of stress around weaning. This results in a negative effect on the lifetime of their neutrophils, reducing their effectiveness.

By improving the longevity of neutrophils, Aromabiotic can **improve the immune function in piglets**. So Aromabiotic really steps in where antibiotics and other additives like organic acids fall short. A Wageningen Research report mentioned it already in 2014: Aromabiotic was the only additive ever tested that could significantly reduce veterinary treatments due to lung problems. This effect on general health can clearly be seen in numerous trials where the use of Aromabiotic results in an **improved health and a lower mortality rate**, even on top of antibiotics (figure 1)! Thanks to this improved health, the **performances of animals can be improved**.

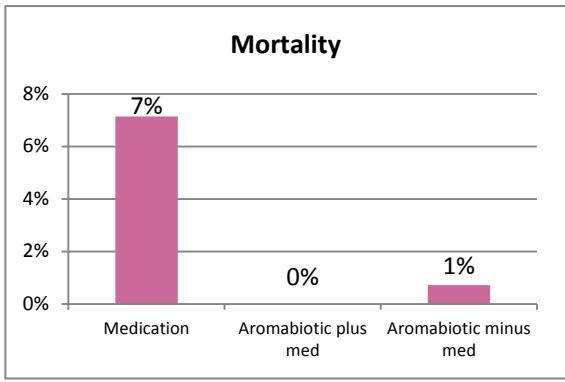
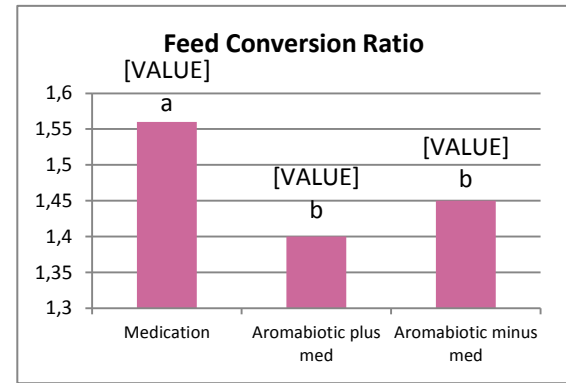
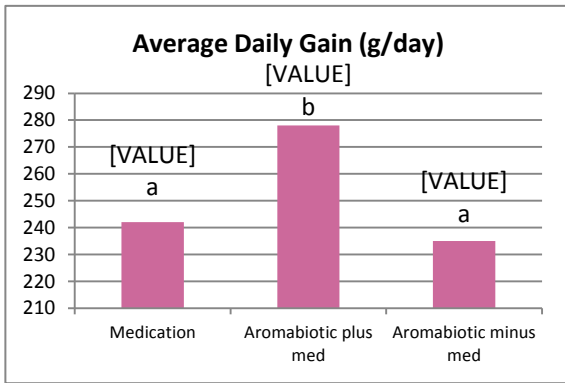


Figure 1: Effect of Aromabiotic on-top or as replacement of the common used medication program on growth performances and mortality for 4 weeks after weaning in piglets weaned at 23 days. The use of Aromabiotic clearly improves performances and reduces mortality.

Nuscience has a **long lasting experience with the use of medium chain fatty acids** to reduce antibiotic use. Thanks to this experience Nuscience can advise feed millers and integrators on the **efficient reduction of antibiotic use** in piglets by the use of Aromabiotic, or a Nuscience piglet concentrate which has Aromabiotic included. In this way **piglet performances can be improved, while the risk for antimicrobial resistance can be reduced!**

