



Reducing *Salmonella* in commercial conditions using Miya-Gold® in fatteners

Trial description

Set-up

- ▶ Location: Commercial pig fattening farm (all in-all out batch system), Germany.
- ▶ Animals: Fattening pigs entered the farm at 30 kg (hybrid cross from Bundes Hybrid Zucht Programm).
- ▶ Measurements: *Salmonella* seroprevalance in meat juice at slaughter detected by ELISA. Optical density (OD) values over 40 were classified as positive.
- ▶ Trial duration: Mid-August 2018 until the end of March 2019.

Treatments

- ▶ The Miya-Gold® group received 500 g Miya-Gold®/mton of feed during the first batch. The dosage was reduced to 300 g/mton for the next batch of pigs.
- ▶ Miya-Gold® is a probiotic containing 5×10^8 CFU viable spores of *Clostridium butyricum* per kg.

Measurements and results

Before slaughter of each batch, 60 blood samples were analysed, showing that over time Miya-Gold® was able to mitigate *Salmonella* prevalence on-farm:

Batch	Blood samples per time point	Positive samples	Negative samples	Average <i>Salmonella</i> titer	Category
Initial group (no Miya-Gold®)	60	43	17	54.81	III
First Miya-Gold® supplemented batch	60	21	39	31.13	II
Second Miya-Gold® supplemented batch	60	16	44	26.92	II

The category is determined by the percentage of positive samples (in this case OD values over 20 are considered positive). The limit between category I and II has been set to 40% positive samples, and the limit between category II and III to 70%.

Conclusion

This commercial case shows how the use of Miya-Gold® can help to reduce and control *Salmonella* on-farm. Miya-Gold® supplementation resulted in a better *Salmonella* category at slaughter which has a beneficial economic impact.