



Miya-Gold® decreases the amount of *Salmonella*-positive fatteners

Trial description

Set-up

- ▶ Location: Commercial farm, Denmark. This farm passed the Danish threshold for financial deduction in carcass price based on *Salmonella* seroprevalance in meat juice at slaughter (*Salmonella* level 2).
- ▶ Groups:
 - Control group: all pigs slaughtered from 31 October until 28 February the year after.
 - Treatment group: all pigs slaughtered from 31 March until 7 September.
- ▶ Sampling: Randomly performed at the slaughterhouse at a frequency of 60 to 100 pigs/year/herd.

Treatments

- ▶ Control group: 7-100 kg pigs that received a basal diet (wheat and barley based).
- ▶ Treatment group: 7-100 kg pigs that received a basal diet + Miya-Gold® at 2 kg/mton feed (1x10⁹ CFU) from 6 to 9 kg, at 1 kg/mton feed from 9 to 15 kg and at 0.5 kg/mton feed from 15 to 100 kg. Miya-Gold® is a probiotic containing 5x10⁸ CFU viable spores of *Clostridium butyricum* per kg.

Measurements

Salmonella OD (optical density) values in meat juice samples. *Salmonella* meat juice samples with OD% >10 were considered positive.

Results

- ▶ In the Miya-Gold® treated group, the number of positive *Salmonella* samples and the average *Salmonella* OD titer were significantly reduced (Table 1).
- ▶ A relative risk of 1.77 for being *Salmonella*-positive in the control group was observed.

Table 1. Number of *Salmonella*-positive animals and average *Salmonella* OD titer

	Control group	Miya-Gold® treated group
% of <i>Salmonella</i> -positive animals (OD%>10)	49% ^a (17/35)	28% ^b (11/40)
Average <i>Salmonella</i> OD titer	27.4 ^a	16.2 ^b

Conclusion

Miya-Gold® reduces the seroprevalance of *Salmonella* in meat juice at slaughter.