

# Aviguard for Commercial Layers – The Clinical Evidence

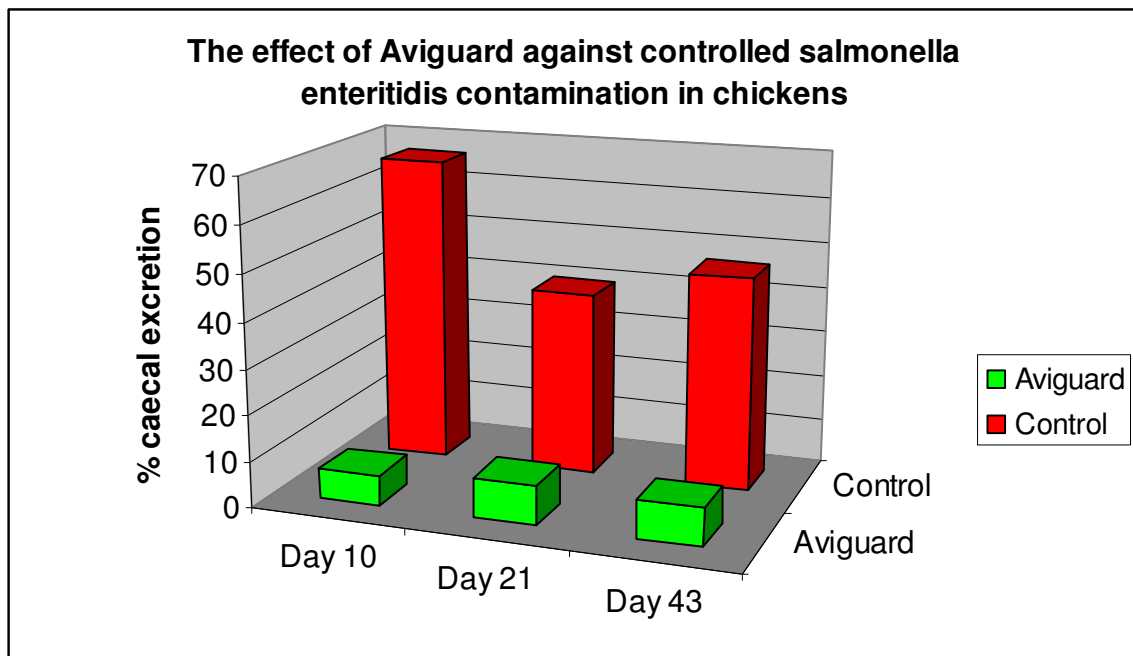
## Salmonella

### Effect of a gut microflora (Aviguard) against controlled *Salmonella enteritidis* contamination in chickens

Guillot J.F et al

Université et INRA de Tours, France

- Birds received aviguard as a coarse spray at day old
- Control group received nothing
- Seeder birds were challenged with  $5 \times 10^5$  *S. enteritidis* phage type 4 and introduced to test birds at day 2
- Test birds were removed at 10, 21 and 43 days and the challenge organism was cultured from the caecal contents
- **The results showed that the application of Aviguard by spray at day old significantly reduced the caecal colonisation of *S. enteritidis* compared to controls**



## Clostridium Perfringens

- Studies by Hofacre et. al. showed that Aviguard compares favourably against growth promoters virginiamycin and zinc bacitracin and is effective in reducing

- gross lesions, mortality and performance losses caused by clostridium perfringens associated necrotic enteritis
- Further studies showed that Aviguard outperformed other CE products and probiotics for necrotic enteritis control
  - In UK field studies enteritis caused by clostridium perfringens has been eliminated from broiler farms with a history of continuous infection after 3 consecutive crop cycles using Aviguard
  - Continuous use of Aviguard each crop cycle has eliminated the use of water soluble antibiotics for treatment of enteritis
  - Aviguard can be considered a serious alternative to antibiotic growth promoters for control of enteritis.

### Pathogenic E. coli

#### Effects of Aviguard on the Caecal Colonisation of Day Old Chicks by Multi-resistant Pathogenic E. coli 078:K80

- A set of naive birds was given direct challenge of 4 log<sub>10</sub> cfu multi-resistant E.coli 078:K80 by oral gavage. These were immediately put amongst experimental groups of chicks to mimic natural spread of disease.
- The E. coli challenge was carried out 24 hours after Aviguard administration to day old chicks.
- Half of each group of chicks was killed at 7 days and half at 14 days.
- E. coli counts were carried out on caecal contents isolated from each bird.
- **Aviguard treatment significantly reduced colonisation by multi-resistant pathogenic E. coli compared to controls.**

