GalliPro® improves chicken performance above the level of antibiotics

Kristina Ulrich Sørensen* and Anée Berg Kehlet
Chr. Hansen A/S, Animal Health and Nutrition, Denmark
*Phone: +45 53 39 03 74, E-mail: dkkls@chr-hansen.com

Introduction

Chickens are hatched under strictly hygienic conditions without influence of microorganisms from other animals or from the environment. These conditions make the chicken gut very vulnerable and unprotected against pathogens making it prone to inflammation. Antibiotics are powerful to eliminate pathogens however it does not cure the inflammation. Probiotics are supportive in the colonization of a beneficial microflora in the immature gut and furthermore has a positive influence on the immune system and animal health.

Materials and methods

Two independent studies with chickens aimed at examining the influence of a *Bacillus* based probiotic (GalliPro®) on weight gain and feed conversion ratio (FCR) in contrast to antibiotics hypothesizing that GalliPro® would perform in line with antibiotics.

Trial one

The first trial (Universidade Federal de Viscosa, Brazil) was performed with 504 Cobb chickens divided into three groups, 0-42 days of age. The chickens were fed a corn-soy based diet differing in additives: 1) control without additives, 2) GalliPro® 8x10^5 CFU/g feed and 3) Bacitracin Methylene Disalicylate (BMD) 50 ppm.

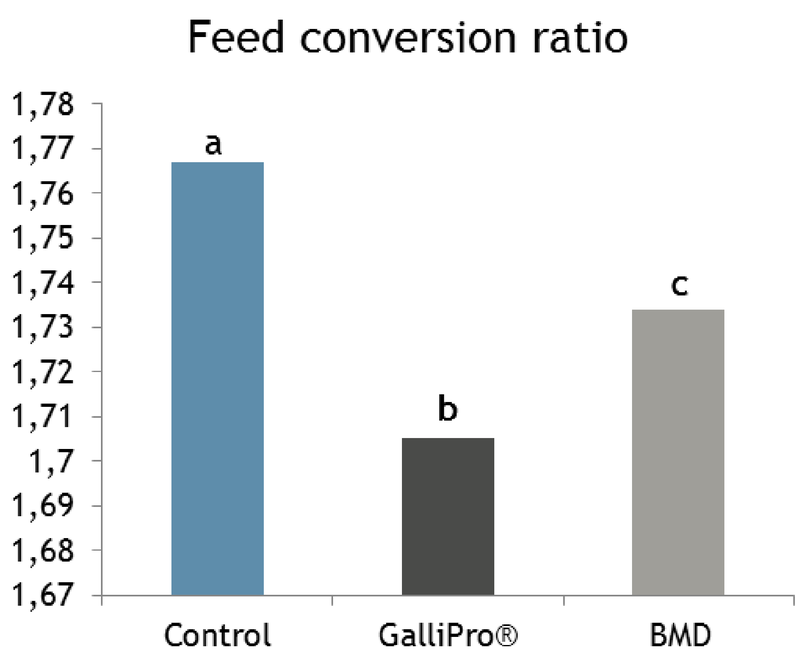
Trial two

The second trial (Cooperative Central Aurora – Research Facility, Chapecó, Brazil) included 1680 Ross chickens divided into three groups, 0-45 days of age: 1) control without additives, 2) GalliPro® 8x10^5 CFU/g feed and 3) Avilamycin 10ppm.

Results

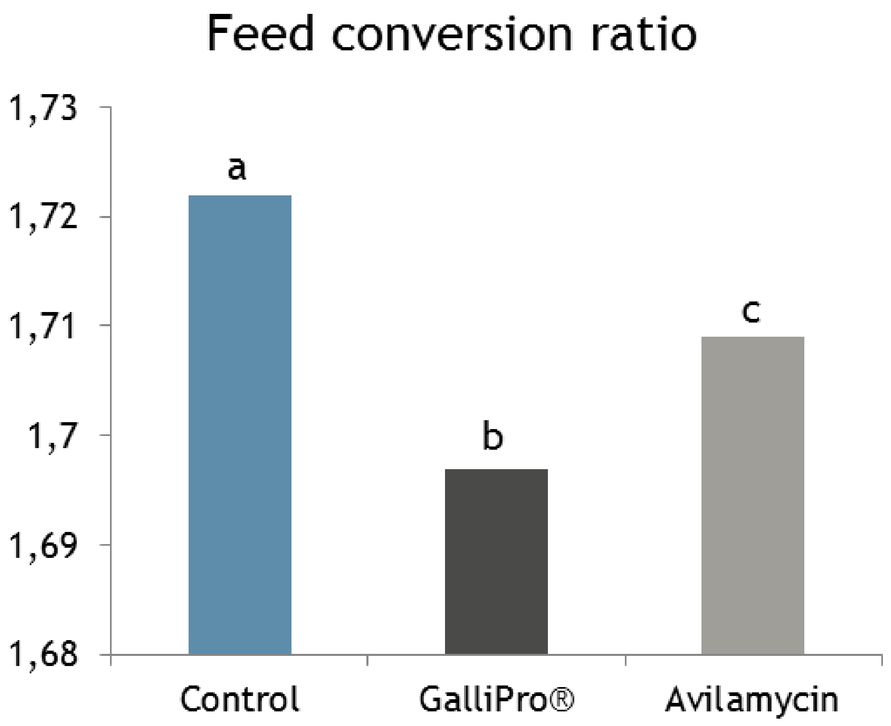
Trial one

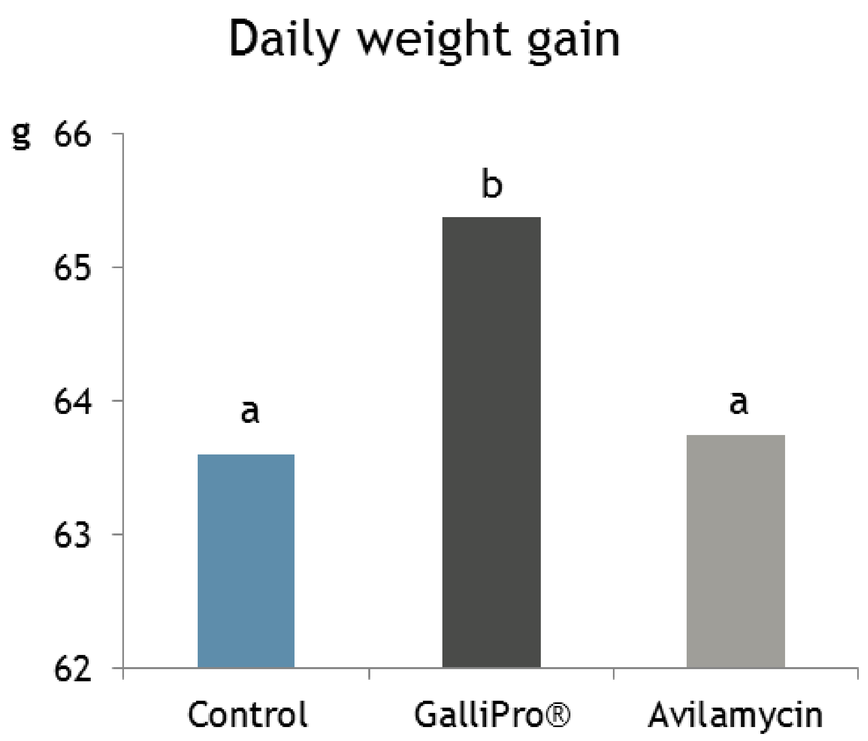
Feed conversion ratio was significantly improved ($P<0.05$) in the GalliPro® fed group compared to both the BMD and the control group. Furthermore, weight gain was numerically higher in GalliPro® fed chickens compared to the other groups.



Trial two

Both FCR and daily weight gain was significantly improved ($P<0.05$) in the GalliPro® fed chickens compared to Avilamycin and the control group.





Conclusion

The results from the two trials show that GalliPro® supplied to chickens improved performance parameters above the level of antibiotics. This indicates that GalliPro® promote a higher general health status than is obtained by use of antibiotics. The results indicate that GalliPro® qualify as an unquestionable alternative to antibiotics and furthermore have the potential to increase production performance in chickens in contrast to a feed without additives.