

A new model of Koch's postulate created by non- attenuated vaccine strains of *Eimeria* spp. in broilers

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The objective of this new model is to establish a base-line data on intestinal pathogenesis in broilers with a controlled challenge by a mixture of predominant species of non-attenuated vaccine strains of *Eimeria*, administered at different ages of 14, 21, 28, and 35 days. Performance parameters, gross lesion scores and oocysts counts in different intestinal organs were determined, and compared statistically. The new model resulted in significant statistical differences in most measured parameters between the controls and challenged birds, including feed conversion, lesion scores and oocysts counts in different parts of the intestine. In addition, this model showed a trend in reduction in weight gain and in getting higher mortality in challenged compared to control birds. These recognized differences will allow for future evaluation of the efficacy of new developed immunomodulators or new coccidiostats aiming at countering the huge negative economic impact of coccidiosis in broiler industry around the world.

Biography

Elie K. Barbour has completed his Ph.D. at the age of 38 years from School of Veterinary Medicine at University of Minnesota in St. Paul, USA. He is a Professor at the Faculty of Agricultural and Food Sciences of the American University of Beirut. He has published more than 125 papers in reputed journals and serving on three editorial boards.

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