Effects of a well-defined multi-species probiotic feed additive on lameness in broiler chickens

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Bacterial chondronecrosis with osteomyelitis (BCO) is the most common cause of lameness in commercial broilers. In four experiments, the usage of a probiotic product (PoultryStar®-BIOMIN GmbH) was investigated starting at day one of age against BCO. Chicks were placed at >60 per pen at day one. In experiments one to four, the experimental diet consisted of control feed mixed with the probiotic product. At day 14, the population was reduced to between 50 and 55 of the healthiest chicks per pen. In three of the experiments survivors at day 56 were weighed, euthanized and necropsied to assess subclinical lesion incidences in femora and tibiae proximal heads. In the four experiments, broilers grown on wire flooring developed high levels of lameness attributable predominately to BCO. Many broilers that did not exhibit lameness, nevertheless did possess early evidence of BCO through clinical lesion development. These experiments showed that by feeding probiotics, the number of birds which developed signs of lameness could be significantly decreased.