

Abstract

Aflatoxins in poultry food adversely impacts broiler growth and health. This research assessed the role of Vitamins (A, C, and E) in broilers fed aflatoxin-contaminated food. The chicks aged 72 days were subjected to six treatments, a negative control, a positive control (140 ppb aflatoxin), and four treatments with increasing vitamin supplementation. The average daily feed intake (ADFi), average daily gain (ADG) and feed conversion ratio (FCR) were measured and compared by one-way ANOVA with Tukey test ($p < 0.05$). Mortality was observed. There was no significant effect on ADFi ($P > 0.05$), which means it had no effect on the feed intake. Nevertheless, there were significant ($p < 0.05$) increases in ADG and FCR when vitamin levels were increased, and the highest (ADG: 32.25 g/day; FCR: 2.89) was achieved at the highest inclusions. There was no observed mortality. In general, vitamin A, C and E improved growth performance in a dose-dependent way.