

# Fallon Brice

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## **Evaluation of the efficacy of test products to ameliorate the toxic effects of aflatoxin present in broiler chick diets**

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An *in vivo* study was conducted to evaluate the efficacy of several adsorbent test products to ameliorate the toxic effects of aflatoxin B1 (AFB1) in chicks. Ninety day-old straight run chicks were purchased from a commercial hatchery, weighed, wing-banded, and assigned to floor pens. A completely randomized design was used with 10 chicks (chick was experimental unit) assigned to each of 9 dietary treatments from hatch to 28 days. The aflatoxin used for this study was supplied by *Aspergillus parasiticus* (NRRL-2999) culture material (815 mg AFB1/kg). The dietary treatments included: 1) basal diet containing no AFB1; 2) basal diet supplemented with 1.5 mg AFB1 /kg diet; 3) As diet 2 plus Product 1; 4) As diet 2 plus Product 2; 5) As diet 2 plus Product 3; 6) As diet 2 plus Product 4; 7) As diet 2 plus Product 5; 8) As diet 2 plus Product 6; and 9) As diet 2 plus Product 7. The addition of Products 1, 2, 3, 4, 5, and 6 to AF diets did not prevent the reduction in body weight gain (BWG) due to AFB1. Chicks fed diets containing Products 1 thru 6 all had lower BWG ( $P > .05$ ) compared with control chicks. Body weight gain of birds fed Product 7 was not significantly different ( $P > .05$ ) from the birds fed the positive control; however, it was also not significantly different ( $P > .05$ ) from birds fed AF B1 alone. Relative liver weights were not affected by dietary treatments ( $P > .05$ ) and averaged 3.06 g/100g body weight across all treatments. Results of this study indicate that none of these products were effective in ameliorating the toxic effects of AFB1.