

**EFFECTS OF CONTINUOUS ADMINISTRATION OF LOW-DOSE ENDOTOXIC  
LIPOPOLYSACCHARIDE IN CHICKS AND POULTS FED NON TOXIC DOSES  
OF AFLATOXIN B1 AND T-2 TOXIN**

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**ABSTRACT**

Six studies (three with broilers and three with turkeys) were conducted to determine if *E. coli* lipopolysaccharide (LPS) would enhance the effects of aflatoxin B1 (AFB1) and the T-2 toxin (T-2) in chicks and poults fed from hatch to 21 days of age. In mortality rate, there was a toxic synergy between AFB1 and LPS in chicks and poults. In birds exposed to LPS and T-2 alone or in combination, LPS did not enhance the effects of T-2 in chicks and poults. In poults, a decrease in performance observed in birds at 2 mg/kg T-2 alone was atypical. In birds exposed to AFB1, T-2, and LPS singly or in combination, LPS did not enhance the effects T-2 and AFB1 on performance. However, LPS did enhance the effects of T-2 on mortality rate and oral lesion in poults and acute mortality rate in broiler chicks. In chicks and poults, LPS-treated groups had lower feed intake immediately after treatment when compared to saline groups. Little or any interactions were detected which may be due to the atypical responses observed when toxins were fed alone.