

# **The Effect of Supplementation of DL-Methionine in Diet Containing Aflatoxin on Blood Profile of Broiler**

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## **Abstract**

This research was to evaluate the effect of supplementation of DL-Methionine on aflatoxin contaminated diet on blood profile of broiler. The experimental was arranged with factorial completely randomized design with three level of DL-methionine (0%, 0.25%, and 0.35% for starter, and 0%, 0.20% and 0.30% for finisher), three level of aflatoxin contaminated corn in the diet (0%, 26% and 52%), and four replications. The aflatoxin contaminated corn were prepared by inoculation of *Aspergillus flavus* into the corn and incubated in room temperature for four weeks. Four hundred eighty day-old broiler chick (strain Ross) were used in this experiment for six weeks. Variable measured were the level of hemaglobin, hematocrit, erythrocyte, leucocyte, leucocyte differentiation and IgY.

The result showed that the level of aflatoxin in the diet varied from 19.24 – 34.50 ppb in starter diet and 66.67 – 78.50 ppb in finisher diet. The supplementation of DL-Methionine had not significant effect ( $p>0.05$ ) on level of hemaglobin, hematocrit, erythrocyte, leucocyte differentiation in starting period. However, the supplementation DL-Methionine decreased of leucocyte blood level during starter period. The increasing of aflatoxin contaminated corn decreased leucocyte level in finishing period significantly ( $p<0.05$ ). During starting period there was interaction between level of DL-Methionine supplementation and level of aflatoxin contaminated corn on erythrocyte and IgY level. The level of IgY significantly ( $p<0.05$ ) increased in broiler fed aflatoxin contaminated diet with supplementation of 0.25% DL-Methionine.

*Keywords: aflatoxin, DL-methionine, corn, blood profile, immune*

*This paper was presented in 2<sup>nd</sup> International Seminar of Indonesian Association of Nutrition and Feed Science (AINI), Padjadjaran University, Bandung, 6-7 July 2011.*