

# Supplementary Materials: Curcumin Prevents Aflatoxin B<sub>1</sub> Hepatotoxicity by Inhibition of Cytochrome P450 Isozymes in Chick Liver

Ni-Ya Zhang, Ming Qi, Ling Zhao, Ming-Kun Zhu, Jiao Guo, Jie Liu, Chang-Qin Gu, Shahid Ali Rajput, Christopher Steven Krumm, De-Sheng Qi and Lv-Hui Sun

**Table S1.** Effects of dietary AFB<sub>1</sub> and CM concentrations on growth performance in chicks <sup>1</sup>.

Item	Control	AFB <sub>1</sub>	CM	AFB <sub>1</sub> + CM
Week 1–2				
Body weight gain, g/day	34.0 ± 1.4	34.9 ± 1.4	33.8 ± 2.0	33.4 ± 2.9
Feed intake, g/day	48.4 ± 8.3	46.8 ± 5.6	45.8 ± 5.5	46.1 ± 5.8
Gain/feed, g/kg	703 ± 132	767 ± 106	746 ± 83.2	734 ± 128
Week 3–4				
Body weight gain, g/day	68.3 ± 8.0	72.9 ± 8.7	68.2 ± 6.9	70.1 ± 6.3
Feed intake, g/day	116 ± 7.8	125 ± 22.9	111.9 ± 8.1	118 ± 11.6
Gain/feed, g/kg	607 ± 26.5	589 ± 27.4	609 ± 38.3	592 ± 41.3

<sup>1</sup> Values are expressed as means ± SD (*n* = 5), and means with different superscript letters differ (*p* < 0.05). AFB<sub>1</sub>, aflatoxin B<sub>1</sub>; CM, curcumin. Experimental details of Control and AFB<sub>1</sub> groups are given in Sun et al. (2016) [1].

**Table S2.** Basal diet formulations and nutritional contents <sup>1</sup>.

Ingredients	Percentage (%)	Nutrition Component	Content
Corn	58.2	Crude protein (%)	20.3
Wheat bran	2.0	Metabolizable energy (MJ/kg)	12.3
Soybean meal	30.0	Calcium (%)	1.0
Soybean oil	2.5	Available phosphorus (%)	0.43
Cottonseed meal	3.0	Methione (%)	0.60
CaCO <sub>3</sub>	1.0	Methione+cystine (%)	0.90
CaHPO <sub>4</sub>	2.0	Lysine (%)	1.10
Salt	0.3	Tryptophan (%)	0.22
L-Lysine (%)	0.15	Threonine (%)	0.69
DL-Methione (%)	0.3		
Choline chloride	0.2		
Vitamin premix <sup>2</sup>	0.05		
Mineral premix <sup>3</sup>	0.3		

<sup>1</sup> The 5% corn in basal diet was substituted by 5% moldy corn in AFB<sub>1</sub> and CM+AFB<sub>1</sub> group diets, respectively, which made the AFB<sub>1</sub> contents up to 100 ug/kg in these two diets. AFB<sub>1</sub>, aflatoxin B<sub>1</sub>; CM, curcumin. <sup>2</sup> Vitamin premix provided per kg of diet: retinyl acetate, 10,280 IU; cholecalciferol 2280 IU; dl- $\alpha$ -tocopheryl acetate, 17.12 mg; menadione, 6.82 mg; thiamin, 2.28 mg; riboflavin, 5.68 mg; pantothenic acid, 12.25 mg; pyridoxine, 2.28 mg; niacin, 22.84 mg; biotin, 0.18 mg; folic acid, 1.12 mg. <sup>3</sup> Mineral premix provided per kg of diet: iron, 100 mg; copper, 8 mg; manganese, 20 mg; zinc, 100 mg; iodine, 0.7 mg.

## Reference

1. Sun, L.H.; Zhang, N.Y.; Zhu, M.K.; Zhao, L.; Zhou, J.C.; Qi, D.S. Prevention of Aflatoxin B<sub>1</sub> hepatotoxicity by dietary selenium is associated with inhibition of cytochrome P450 isozymes and up-regulation of six selenoprotein genes in chick liver. *J. Nutr.* **2016**, *143*, 1115–1122.