

Pranee Pirompuud 2006: Effects of Feeding Betaine and Dietary Electrolyte Balance on Broiler Performance and Carcass Traits. Master of Science (Agriculture), Major Field: Animal Science, Department of Animal Science. Thesis Advisor: Assistant Professor Seksom Attamangkune, Ph.D. 69 pages.
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An experiment was conducted in order to investigate the effects of feeding betaine and dietary electrolyte balance on broiler performance and carcass quality. Two thousand five hundred and twenty day-old Ross 508 male broiler chicks were randomly assigned to 2x3 Factorial in CRD. The treatments were the combination between two factors which were dietary electrolyte balance (No DEB and DEB) and levels of betaine supplementation (0, 0.05 and 0.10%)

Feeding betaine at the levels of 0.05 and 0.10% significantly improved body weight, body weight gain, and feed gain ratio in broiler during 1-21 days of age. However, no significant improvement in broiler performance was subsequently observed during 22-42 and 43-49 days of age.

Broilers fed diets with adjusted dietary electrolyte balance showed no improvement in performance during 1-21 and 22-42 days of age but significantly increased body weight and body weight gain as well as improved feed gain ratio during 43-49 days of age

In carcass traits study, feeding betaine at the levels of 0.05 and 0.10% tended to increase breast meat yield and significantly reduced the skeletal weight compared to the control. No improvement in carcass quality was observed in broilers fed diets with adjusted dietary electrolyte balance.

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