

THE METABOLIZABLE ENERGY OF RICE BRAN AS MEASURED WITH NATIVE OF RICE BRAN AS MEASURED WITH NATIVE
AND A MODERN STRAIN OF CHICKEN

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Rice bran is a single ingredient that is usually fed to chickens owned by small farmers in rural areas. Many experiences in the field indicate that native chickens have a better ability to survive compared to modern strains under these conditions. This ability has raised questions as to whether there are any differences concerning the metabolism of nutrients in rice bran, between native and modern types of birds.

An experiment was designed to examine their ability to utilize energy in rice bran, by measuring metabolizable energy of rice bran with the two different types of birds.

The metabolizable energy (ME) measurements were conducted using the method proposed by Matterson et al. (1965), with 20% and 30% substitution levels of rice bran. The native and modern layer strain of chickens used were nine weeks of age.

Table. ME (kcal/kg) of rice bran measured with native and modern layer type chickens

Breed	Experiment 1 Substitution level		Experiment 2 Substitution level		Experiment 3 Substitution level	
	20%	30%	20%	30%	20%	30%
Native	3037	3167	2977	3034	3136	3048
Modern	3097	3118	2950	3064	3151	3140

No statistical differences were seen in ME values due to breed or substitution level within each experiment.

Body weight gain during the four week experimental period indicated that the modern type of bird grew significantly better than native bird being 418 g and 357 g respectively, with a similar feed conversion ratio of 3.82 and 3.88.

The results of this study support the contention that the reduced ability of the modern type of bird to survive in an extensive system is not caused by a reduced ability to utilize dietary energy.

MATTERSON, L.D., PATTON, L.M., STUTZ, M.W., and SINGSEN, E.P. (1965). The metabolizable energy of feed ingredients for chicks. Conn. Agr. Exp. Sta. Res. Report 7, pp 3-11.

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