The Use of Clay in Poultry Feed*

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Abstract: Dietary clay supplements (bentonite and kaolinite) have been used as binding and lubricating agents in the production of pelleted feeds for chickens. The high-swelling and water absorbing capacity of some bentonites make them attractive dietrary additives for control of wet droppings in caged lay layers. In addition, experiments show that layers fed on these diets exhibit significant increases in body weight, egg size, and life expectancy even though their total caloric intake is less than that of the control group. Dietary kaolin improves caloric efficiency even more than bentonite but without apparent effect upon growth or carcass quality. Kaolins of smaller particle size are superior to those of larger size in improving caloric efficiency. The effective kaolins are estimated to be worth approximately two calories of metabolizable energy per gram. The major beneficial effect appears to be due to a slowing down of the rate of feed passage through the intestinal tract. Possible uptake of trace elements required for optimum nutrition has not yet been evaluated.

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