

CRPS Current Research in **Poultry Science**

News & Comments Immense Possibility for Improving the FE of Small-sized Meat Ducks

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With an output of more than 4.1 billion meat ducks annually, China will account for 68% of the world's production in 2021. A current obstacle in the production of small-sized meat ducks is low Feed Efficiency (FE). It is common knowledge that the cost of feed makes up roughly 70% of the total cost of producing meat ducks. The authors state that FE is often defined as Feed Intake (FI) per unit of Average Daily Gain (ADG), also known as the Feed Conversion Ratio (FCR), which is well known to and frequently applied by farmers. The study focuses on the FE, breeding methods, nutrient needs, and strategies for raising small-sized meat ducks.

The article is published in Science Direct. In the study, LRFI ducks had lower ACTH and COR concentrations than HRFI ducks. The differences, however, were not statistically significant (p>0.05). Like this, earlier research has shown that low RFI hens and lambs have reduced ACTH concentrations. Adipose tissue is the main source of LEP, which is known to control FI and BW. It has been linked to increased fatness and decreased FE, according to reports. Like the outcomes of this investigation, the LEP concentration was not associated with FI or FE. CCK, a hormone secreted by the duodenal mucosa that also exists in the brain, controls how quickly the stomach empties the gallbladder and the secretion of enzymes by the pancreas, proclaimed the authors.

The authors explained that it is reasonable to believe that an appropriate reduction in FI can preserve the health status of small-sized meat ducks based on the findings of this study and previous research.

In conclusion, the results support the huge potential for raising the FE of tiny meat ducks. Additionally, the findings imply that choosing small meat ducks with low RFI is advantageous for increasing FE while having no negative effects on BWG, marketing BW, carcass composition, or meat quality. In addition to providing a theoretical foundation for the use of RFI in duck breeding, the current work offers insightful information on the biological mechanisms driving the variances in FE of small-sized meat ducks.

KEYWORDS

Small-sized meat duck, residual feed intake, production performance, correlation analysis

