

## **Comparison of Conventional and Semi-Conventional Management Systems on the Performance and Carcass Yield of Broiler Chickens**

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### **Abstract**

Animal welfare and products quality have become issues of great concern in animal agriculture. Industrialized commercial and highly production system has been criticized for failure to provide adequate welfare. Therefore, there is need to document commercial productivity research gap between conventional and semi conventional rearing systems on the performance and carcass yield of broiler chickens in Nigeria ecosystem. One hundred and fifty (150) 3 weeks old Marshal Strain of broiler chickens were randomly allocated into two treatments of three replicates per treatment to determine performance and carcass yield under conventional and semi conventional management systems. Birds under conventional system were fed ad libitum while those under semi conventional system were given seventy percent feed quantity of broilers under the conventional system. Data were collected on final body weight (FBW), total weight gain (TWG), feed intake (FI), Mortality and feed conversion ratio (FCR) for performance indicators while dressing percentage, major cuts, organs and offals were determined for carcass yield. Broiler chickens reared using conventional system recorded highest ( $p < 0.05$ ) final body weight (2238.7g/bird), total weight gain (1857.7g/bird) and relative breast weight (18.51%). Broiler chickens reared under semi conventional recorded superior ( $p < 0.05$ ) FCR (1.97) and abdominal fat content (0.89%) compared with those on conventional system that recorded 2.11 and 1.32%, respectively. The study revealed that semi conventional system could be employed in broiler chicken production where superior FCR and low fat (leaner meat) is preferred.

**Keywords:** conventional system, semi conventional system, broiler, management, carcass yield

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**Target Audience:** Animal scientists, Broiler producers, Meat processors, Extension officers