

## **Effect of the Pellet Size on Pellet Durability and Feed Conversion Ratio of Broiler Chicken**

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There are enough information reported, to determine the suitable pellet form and its' effect on feed conversion ratio for broilers, not for the pellet sizes. Hence, present study was conducted to determine the effectiveness of three different pellet sizes on feed conversion ratio (FCR) of broilers and pellet durability index (PDI) of broiler finisher feed. Keeping quality of broiler finisher feed was checked for two months under room temperature. A total of two hundred and twenty five 22-day old broiler chickens were randomly assigned into three dietary treatments. Each treatment comprised of three replicates and twenty five broiler chickens were included in each replicate. Broilers were randomly allocated to one of three experimental diets and fed for 14 days in a complete randomized design. The dietary treatments included two different pellet sizes and the existing pellet size as control group; T0 (0.5 cm), T1 (1.25 cm) and T2 (0.2 cm). Body weight and feed intake were recorded during the experiment period. Three sizes of pellets were stored for two months under the same conditions to check the keeping quality of the pellets. Under the proximate composition evaluation, crude protein, crude fat, crude fiber, moisture and ash content were evaluated. Data were analyzed by one way (weight gain, feed intake and FCR) and two way analysis (proximate composition analysis) of variance of Minitab 17 software. The feed intake, weight gain and the FCR of chicken were not affected ( $p>0.05$ ) by dietary treatments. The PDI was not affected ( $p>0.05$ ) by the treatments with time. In keeping quality analysis, there was no significance ( $p>0.05$ ) difference of pellet sizes with time. In conclusion, there were no any effect of the pellet size on PDI and FCR of broiler chicken.

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