The Effect of Antibiotic Supplemented Feed on Growth Rate of Broiler Chicks

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The purpose of this project was to find the effect of antibiotics on the growth rate of broiler chicks to maturity when they are processed. Research shows evidence of antibiotics producing a higher rate of gain. The current use of antibiotics is for therapeutic purposes, in the treatment of a specific disease, usually given under a veterinarian's approval. This study is important because of the discussion about if antibiotics are helpful for a higher rate of gain and reduction in mortality. Broiler chicks were purchased and housed in a barn in two pens with 53 in each pen. The chicks were fed twice a day, in the morning and afternoon. Each group was given the same amount of feed, the only difference in feeding was one group had tetracycline antibiotics added to their feed and the other was the control group. Each week for six weeks, I weighed all of the chicks in each pen to find the average for each group. The average rate of gain per chicken for the antibiotic group was 73.3 ounces and for the control group was 80.1 ounces over a six week period. Using a two means theory based inference statistical test, there was no significant difference of the growth rate of broiler chicks fed with tetracycline added to their feed from the control group of chicks fed without antibiotics. Using the same statistical test, there was a statistical difference at a $p < .05$ level that tetracycline antibiotics did decrease the mortality rate.

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