**A STUDY ON EFFECT OF GARLIC POWDER ON PERFORMANCE OF BROILER**



A Clinical report

Submitted as per approved style and contents

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**EFFECT OF GARLIC POWDER ON PERFORMANCE OF BROILER**

**Abstract**

Garlic powder contains several biologically active substances with prebiotic activity. The aim of this experiment was to evaluate the influence of dietary supplementation of garlic powder on performance,and serum lipid profile parameters of broiler chickens. A total of 108 day old chicks (DOC’s) were randomly distributed in three groups in a completely randomized design (CRD) having three replications per group. Those birds were treated either without garlic powder (GP) (T0/control) or with 1% GP (T1) and 1.5% GP (T2) in their regular basal diet and reared for four weeks. Data on performance parameters (feed intake, live weight, feed conversion (FC), weight gain etc.) were measured on weekly basis and data on serum lipid profile parameters (i.e. Cholesterol, Triglycerides, LDL-cholesterol and HDL-cholesterol levels), were recorded at the end of the experimental period. Results revealed that there was significant (P<0.01) increase in feed consumption by birds at 1st, 3rd and 4th weeks of age of broilers with supplementation of garlic powder. Initially no significant (P>0.05) difference was observed in body weight of broilers. Then, highly significant (P<0.01) differences were observed in body weight of birds throughout the whole experimental period with highest weight in 1.5% GP supplemented group (T2). The second highest value was observed in T1 group (1% GP). FC was significantly improved in 1st (P<0.05), 2nd, 3rd, and 4th weeks of age of birds (P<0.01) with better FC in groups supplemented with GP. Cumulative FC was also significantly (P<0.01) improved upto 3rd and 4th weeks of age of birds both in T1 and T2 groups compared to control group. The Cholesterol, triglyceride and LDL-cholesterol levels were significantly (P<0.01) decreased in GP supplemented groups (T1 and T2). Significantly higher HDL-cholesterol level (P<0.01) was found in T1 and T2 groups than T0 group. Almost all the performance parameters were best in 1.5% GP treatment group than all the groups. This may be recommended for broilers.

**Keywords:** broilers, performance, garlic powder, serum lipid profile.