

**EFFECT OF FEEDING LIV-52 POWDER ON GROWTH PERFORMANCE OF BROILER CHICKS**

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**ABSTRACT**

An experiment was conducted on 60 broiler chicks from day old to six weeks of age to study the effect of feeding Liv-52 powder on their performance. The birds were divided into three groups consisting 20 in each. T1 (control) fed on standard broiler diet, T2 and T3 groups were supplemented Liv-52 with 0.05 and 0.1% of feed. All the experimental groups were isocaloric. The average final live body weight at six weeks of age and weekly gain in body weight were significantly higher in T2 and T3 group supplemented with Liv-52 than control.

The average feed consumption from 0-6 weeks of age was 3292.5, 3496.78 and 3503.05 gms in T1 (control), T2 and T3 groups respectively and the corresponding feed efficiency at 6th week of age was 2.06, 1.62 and 1.73. It was revealed that feed efficiency was more in Liv-52 treated group as compared to control group.

**KEY WORDS:** Broiler, Liv-52, Supplementation, Growth physiology, Medicine.

**INTRODUCTION**

The herbal growth promoters are safer and as they are cheap and easily available, one can use them for improving growth rate as well as production without any residual effect. Moreover, these herbal growth promoters are environment friendly, low risk of toxicity. In Ayurveda, these herbal ingredients were used since ancient time of some herbal product both in medical and veterinary field viz. Livomyn, Livogen, Livol and Liv-52 as a growth promoter and liver tonics. Liv-52, a herbal product is a stomachic, appetizer and used as a tonic in liver disorders, it also improves the secretion of bile and thereby helps in effective digestion of proteins, carbohydrates and fats.

Live 52 powder has been developed as hepatic stimulant, growth promoter and production enhancer for poultry with recommended dose of 250 - 500 gm/ tonne of feed for growers, layers and broilers.

**MATERIALS AND METHODS**

The present study was conducted on 60 day old healthy broiler chicks divided into three groups of twenty each. The experimental birds were reared on deep litter system. Clean and fresh drinking water was provided ad-libitum, throughout the experiment. The control (T1) group was fed ad-libitum with standard feed containing 21.86% crude protein, treatment group T2 and T3 were provided same standard feed supplemented with 0.05 and 0.1 per cent Liv-52 powder in the feed, respectively. Effect of Liv-52 powder on live body weight, weekly gain in weight, weekly feed consumption and feed efficiency of broilers was studied for the period of 6th week. The data recorded was analyzed using Randomized Block Design (Snedecor and Cochran, 1994) and result are shown in Table.

**RESULTS AND DISCUSSION**

The live body weight of Liv-52 powder supplemented groups was increased significantly ( $P < 0.05$ ) than that of control group. Therefore, the inclusion of Liv-52 powder @ 0.05 and 0.1 percent in feed could improve the live body weight of broilers. The present findings are supported by Prasad et al. (1984), Dakshinkar et al. (1985) and Joshi and kumar (1987), Kumararaj et al. (1997) and Jin et al. (1998).

It was observed from the result that there was significant increase in gain in body weight in T2 and T3 groups over the control. The results thus indicated the significant improvement in nutrient utilization in Liv-52 powder supplemented group. The similar results were observed by Joshi and kumar (1987), Sinha et al. (1993), Raju et al. (2005) and Juarez et al. (2009).

**Table: Growth performance of broiler**

Expt. Week	Live body weight (gm)			Weekly gain in body w	
	Control (T <sub>1</sub> )	T <sub>2</sub>	T <sub>3</sub>	Control (T <sub>1</sub> )	T <sub>2</sub>
0 day	49.00	48.80	49.00	-	-
1 <sup>st</sup> week	117.50	121.50	117.00	68.50	72.70
2 <sup>nd</sup> week	226.00	232.50	226.00	108.50	111.00
3 <sup>rd</sup> week	380.00	377.00	390.00	154.00	144.50
4 <sup>th</sup> week	685.00	691.00	719.00	305.00	314.00
5 <sup>th</sup> week	1171.00	1200.00	1240.00	486.50	509.75
6 <sup>th</sup> week	1654.50	1817.00	1820.00	1605.50	1768.20

Feed consumption was found to be significantly ( $P < 0.05$ ) increased in Liv-52 supplemented groups than control. Feed conversion efficiency was found significantly ( $P < 0.05$ ) improved in T2 and T3 groups as compared to control. The efficiency with which the broilers convert feed into body mass (meat) is a major factor relating to economy. The feed consumption could be improved by growth stimulants in broilers as reported by Khire et al. (1981), Sinha et al. (1993), and Kumararaj et al. (1997).

Thus, better feed conversion efficiency by using Liv-52 powder could possibly reduce the cost of feed required per kg gain in body weight to some extent. The present findings are in agreement with Subramanian et al. (1981), Prasad et al. (1984), Sinha et al. (1993) and Jin et al. (1998).

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