

## Analysis Of Variance (ANOVA) Cholesterol of Count of Broilers

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**Abstract:** This research investigates that Analysis of variance (ANOVA) Cholesterol of count of broilers. It was revealed that reported significant ( $P > 0.05$ ) difference in cholesterol count of broilers among the groups. All-pair-wise (LSD) test indicated that there was significant variation in total protein count between treatment groups B, C, D with control group-A, respectively. The result (Figure-14) indicated that average cholesterol count in groups A, B, C and D was 117.67, 121.67, 118.33 and 124 g/dl, respectively. Maximum cholesterol count of 124 g/dl were noted in group D where the bird fed on Herbitol level of 6 ml / liter of water as compared to group B (121.67 g/dl) where the birds fed on Herbitol level of 2 ml / liter of water. The average cholesterol count further decreased to 118.33 g/dl in group C where the bird fed on Herbitol level of 4 ml / liter of water. Minimum cholesterol count (117.67 g/dl) was recorded for group A (control) where the birds do not fed on Herbitol compound.

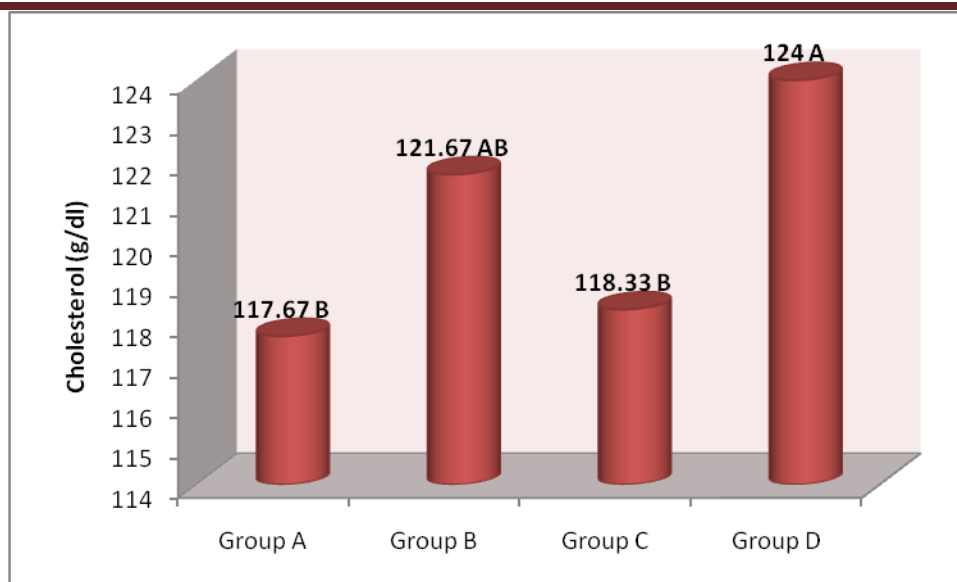
**Key Words:** Analysis, Variance, Cholesterol

### Introduction:

History of herbs is as long as the human story, since the earliest times, people uses these plants. War has been fighting to conquer the land because of the plant, even if today we continue to rely on many of our new alien species pharmaceuticals and chemicals (Richmond and Mackley, 2000). Now a days many countries tended to minimize or ban the chemical components for their harmful side effects on both animals and human. So, it is essential to use natural herbs. In China medicinal herbs have been used for growth of broilers (Sajid *et al.*, 2015). In addition, many plants have natural properties, e.g., tonics, antiparasitic, anti-fungal, stimulant, carminative antiseptic, anti-bacterial and anti-microbial (Soliman *et al.*, 1995). Edible plants, herbs, and Vegetable spices are suggested as non-traditional growth promoters or feed additive in diets to increase the growth of broiler, feed conversion efficiency (FCR) and decrease the feed cost (Hassan *et al.*, 2004). In broiler diets useful herbal plants supplemented as growth promoters and detected a noticeable development in their body weight, feed conversion and mortality percentage (Sabra and Mehta, 1990). Herbs and herbal products positively influence the growth performance (Guo *et al.*, 2000). Mottaghitalab (2000) reported that garlic may be used as a natural herbal growth promoter for broilers, without any side effect, neither for chicken performance nor for consumers. Wezyk *et al.* (2000) reported that replacing antibiotic growth promoters with herbs resultantly decrease the body weight, increased feed conversion ratio. The results of some experiments with broiler chickens indicate that herb supplements have a positive effect on the growth performance and the colour of skin (Zglobica *et al.* 1994). Feeding dietary garlic powder for 21 days significantly reduce plasma cholesterol level of broiler chicken, without altering the growth performance of the broiler chickens or the feed efficiency (Konjufca *et al.* 1997). Hematology normally contains the full blood count and the organs which are responsible for blood formation. The full blood count includes red blood cells, platelets, packed cell volume, hemoglobin, white blood and the red blood cell; mean cell volume, mean corpuscular hemoglobin and mean corpuscular hemoglobin concentration (West and Haines, 2002). Sajid *et al.* (2015) observed that supplementation of herbal products showed significant effect against the on the immune response of broilers against various infectious diseases. Herbal medication showed significant effects on blood glucose and red blood cells (RBC), but showed non-significant effect on hemoglobin, white blood cells (WBC), cholesterol and packed cell volume (PVC), in their conclusion, herbal supplementations in broiler showed positive effect on immunity, performance and blood parameters. The composition of herbitol is composed of Dextrose, Ginger ext; Allium ext; Vinigar, Clove oil, Belladonna, safrol + biochemic salts. Herbitol is used mainly for growth promotion and for constipation. Keeping in view the above facts, present study is plan to investigate the effect of commercial herbal compound (Herbitol) on the feed intake and blood hematology of broiler chicken

### Results and Discussions:

The results reveal that broilers in group D received highest total protein count as compared to broiler in group B, C and A, respectively.



Normal range : 89.90 – 71.10 g/dl

Figure 14: Cholesterol count (g/dl) of broiler fed on various level of commercial Herbitol compound.

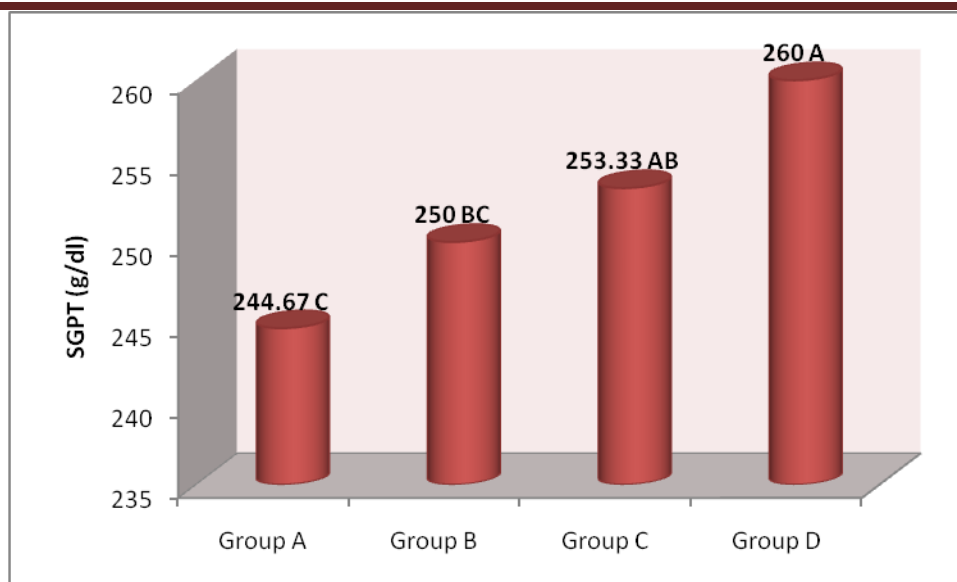
S.E.±	1.9579
LSD 0.05	4.5149
P-value	0.0380*

The values in column matching with similar alphabets did not differ significantly at probability level of 0.05.

#### Serum glutamic pyruvic transaminase

Analysis of variance (ANOVA) reported significant ( $P > 0.05$ ) difference in serum glutamic pyruvic transaminase count of broilers among the groups. All-pair-wise (LSD) test indicated that there was significant variation in total protein count between treatment groups B, C, D with control group-A, respectively.

The result (Figure-15) indicated that average serum glutamic pyruvic transaminase count in groups A, B, C and D was 244.67, 250, 253.33 and 260 g/dl, respectively. Maximum serum glutamic pyruvic transaminase count of 260 g/dl were noted in group D where the bird fed on Herbitol level of 6 ml / liter of water as compared to group C (253.33 g/dl) where the birds fed on Herbitol level of 4 ml / liter of water. The average serum glutamic pyruvic transaminase count further decreased to 250 g/dl in group B where the bird fed on Herbitol level of 2 ml / liter of water. Minimum serum glutamic pyruvic transaminase count (244.67 g/dl) was recorded for group A (control) where the birds do not fed on Herbitol compound. The results reveal that broilers in group D received highest serum glutamic pyruvic transaminase count as compared to broiler in group C, B and A, respectively.



Normal range : 4.42 – 6.36 g/dl

**Figure 15:** Serum glutamic pyruvic transaminase count (g/dl) of broiler fed on various level of commercial Herbitol compound.

S.E.±	3.7342
LSD 0.05	8.6111
P-value	0.0199*

The values in column matching with similar alphabets did not differ significantly at probability level of 0.05.0

### Conclusions

average serum glutamic pyruvic transaminase count in groups A, B, C and D was 244.67, 250, 253.33 and 260 g/dl, respectively. Maximum serum glutamic pyruvic transaminase count of 260 g/dl were noted in group D where the bird fed on Herbitol level of 6 ml / liter of water as compared to group C (253.33 g/dl) where the birds fed on Herbitol level of 4 ml / liter of water. The average serum glutamic pyruvic transaminase count further decreased to 250 g/dl in group B where the bird fed on Herbitol level of 2 ml / liter of water. Minimum serum glutamic pyruvic transaminase count (244.67 g/dl) was recorded for group A (control) where the birds do not fed on Herbitol compound. The results reveal that broilers in group D received highest serum glutamic pyruvic transaminase count as compared to broiler in group C, B and A, respectively.

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