

Abstract

One hundred-one, day old, (Avian 34) broiler chicks were divided into 5 groups as follow.

Group 1:

This group contains 20 chicks. They were given commercial balanced broiler ration from-one- day old to 6 weeks old as a control group.

Group 2:

This group contains 20 chicks. They were given the ration as control plus 2% fresh minced garlic cloves.

Group 3:

This group contains 20 chicks. They were given the ration plus 4% fresh minced garlic cloves by.

Group 4:

This group contains 20 chicks. They were given the ration plus vit. E powder 150mg/kg / ration.

Group 5:

This group contains 20 chicks. They were given the ration plus vit. E powder 300mg/kg / ration.

Samples of blood and organs were collected from 5 chicks at 2nd, 4th and 6th weeks. The body weight and food intake recorded weekly in every group.

The results showed that:

-Garlic has a positive effect on body weight and food intake in the group received 2% fresh minced garlic only while garlic by 4% unuseful at first 4 weeks.

-The hematological findings showed minimal changes depends on garlic supplement.

-The biochemical findings revealed significant decrease in cholesterol and serum glucose level with fresh minced garlic supplementation.

-The pathological observations confirmed the hematological and biochemical results. It showed minimal pathological changes in hepatocyte and glomerular epithelium in the group received 4% fresh minced garlic.

- Vit. E showed good results on food intake and growth rat it could be used as a good growth promoting agents. Vit. E induced positive significant hematological changes. The biochemical changes showed in-significant dependent on vit. E level.

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LIST OF ABBREVIATION

RBCs	_____	Erythrocytic count in million/ cubic ul blood
Hb	_____	Hemoglobin concentration in gm/ dl
PCV	_____	Packed Cell Volume in (%)
WBCs	_____	Leukocytic count in thousands / cubic ul blood
MCV	_____	Mean Corpuscular volume in femtoliter (fl)
MCH	_____	Mean corpuscular hemoglobin in picogram (pg)
MCHC	_____	Mean corpuscular hemoglobin concentration in (%)
AST	_____	Aspartate aminotransferase IU/L
ALT	_____	Alanine aminotransferase IU/L
AP	_____	Alkaline phosphatase IU/L
AGE	_____	Aged garlic extract
LDL-C	_____	Low density – Lipoprotein cholesterol
VLDL- C	_____	Very low density – Lipoprotein cholesterol
HDL- C	_____	High density – Lipoprotein cholesterol
EDTA	_____	Potassium salt of ethylene diamintetracetate
W1	_____	1 st week
W2	_____	2 nd week
W3	_____	3 rd week
W4	_____	4 th week
W5	_____	5 th week
W6	_____	6 th week