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Effect of Addition Different Levels of Dried Kefir Milk to the Ration in Some Ratio of Serum Proteins to Broiler Chicks Ross 308

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Abstract
This study was conducted at Poultry Farm of Animal Resources Dept., College of Agriculture, University of AL-Qasim Green to investigate Study the effect of addition different levels of dried Kefir milk to the ration in some ratio of serum proteins to broiler chicks Ross 308 .Use the 240 broiler chicks Ross 308 day-old were randomly assigned to four treatments by 60 chicks per treatment by 4 replicates per treatment (15 chicks per replicate), and treatments were as follows : Treatment for the first (control) without adding dried Kefir Milk into the ration, the second treatment: Add dried Kefir Milk by 0.2 % , third-treatment: Add dried Kefir Milk by 0.4 % and treatment fourth : Add dried Kefir Milk by 0.6 % . The experiment included a study of the following characteristics : Pre-albumin , Albumin , Post-albumin , α-Glob , β-Glob and γ-Glob . The results indicated that the addition of dried Kefir Milk by 0.4 and 0.6 % to broiler diet led to a significant improvement ($p<0.05$) in Albumin , Post-albumin and γ-Glob.It concluded from this experience, that the addition of dried Kefir Milk by 0.4 and 0.6 % feed to the ration can lead to improve in some ratio of serum proteins to broiler chicks .
Keywords: dried Kefir milk , serum proteins , broiler chicks

Introduction

The serum proteins are no fixed rates in the normal case, but the birds subjected to a change in the environmental and health conditions lead to a change in the proportions of these proteins (Jain, 1989). This is because the health stress factors (Tohijo et al., 1995), or heat or nutrition that will affect the liver cells and lymph effective to manufacture these proteins and then the study and determine the ratios of these important proteins in determining the health status and good physiological birds. The protein (Pre-albumin) is a type of blood serum albumin not exceed 3% believed that this protein an important role in the production of eggs (Sturkie, 1986) . The Protein albumin serum is the main protein has an important role in the body's stability in the event of abnormal changes that are exposed as well as its role as a carrier of many food ingredients, which include minerals, vitamins, fatty acids and thyroid hormones bird (Wood et al., 1971), consisting of proteins albumin blood protein also Pre-albumin and Post - albumin as the first of the great importance of proteins in egg production and has a small percentage does not exceed 3% (Sturkie, 1986). The second protein is a small percentage of the total albumin serum and stress factors working to reduce the rate significantly, indicating its importance as evidence for the occurrence of stress. As for the protein γ-Globulin is immune protein, which would improve the immune response of broilers and including the total serum protein ratios equivalent to almost 100% , any increase in one of the proteins ratios reflected in the decline in other proteins .

Kefir milk is the result of mixing granules Kefir (farm revive the microscopic useful) with milk as described by Leite et al., (2013). These granules remain effective milk fermented without losing its activity for several years (Wszolek et al., 2006), was Tomislav et al.,(2013) he pointed out that the main group microscopic organisms that make up this milk is bacteria, lactic acid and acetic and yeasts. This product consumed for thousands of years in the mid-Asia, Europe and the United States and Japan, high nutritional value and believes that the word kefir is derived from the Caucasus Mountains (Grishina et al., 2011), previous research suggests that milk Kefir stimulates the immune system and anti-cancer and sink to the level of cholesterol in blood to avoid diseases heart and hardening of the arteries, has been among the world's Bulgarian Metchnikoff (1907) that there is a positive relationship between eating fermented milk and longevity, and the development of the theory that biology microscopic useful in milk products fermented and consumed by residents competed with pathogenic bacteria in the digestive tract and is also referred to by both (Maeda et al., 2004 (and the bacteria lactic acid important role in the microbial balance, digestion and stimulate the body's immune this is what makes the use of milk Kefir upping vital is used in human nutrition, animal and enhances public health and production (Can et al., 2012 Ahmed; et al., 2013) as well its content of vitamins, minerals, amino acids and their effect on the nervous system healthy (Kesenkas et al., 2013). Thus emerged the importance of using researchers to milk Kefir booster vital instead of using life antibiotics that the imposition of the EU ban on use as additives fodder (Kabir, 2009) they may effect a negative impact on animal health and human fear of the people of the transmission of resistant bacteria from animals to humans (Apata, 2011). Due to the above, the objective of this

study was to determine the effect of adding milk powder Kefir to ration on some blood serum proteins for broiler chicks Ross 308.

Materials and Methods

This study was conducted at Poultry Farm of Animal production Dept., College of Agriculture, University of AL-Qasim Green from 11/3/2015 to 21/4/2015. Use the chick 240 broiler chickens Ross and average weight of 41 g / chick. It has been raising chicks in cages ground 1 x 1.5 meters, and random chicks were distributed on four treatments each of which consists of four replications, with each duplicate contained 15 chicks. It has been providing feed for the birds freely and fed the birds on a ration (Table 1) , and added with different levels of milk powder Kefir and loaded on SBM and prepared in advance and were treatments experiment as follows: the first treatment (control) without any additives (ration Standard), the second treatment: add 0.2% milk powder with a material bearing on the standard diet, third treatment: 0.4% milk with added dried material to the standard-bearing bush, and the fourth treatment: add 0.6% milk powder with a material bearing on the standard diet. The experiment included a study of the following attributes: Pre-albumin, Albumin, Post-albumin, α-Glob, β-Glob and γ-Glob. As was the collection of blood in week 6 of 8 birds from each treatment (2 birds from each repeater) at random and were blood collection after the slaughter of birds which were used in pipeline does not contain the anti clotting in order to get the serum (Blood serum) after coagulation and separated using a centrifuge speeds of 3,000 RPM for 15 minutes and kept the serums in a clean tube and the degree of -20 m until checks types of blood serum proteins ratios were deported serum samples electrically gel (Acrylamide) and after the migration ends and dye been diagnosed with proteins separated by comparing them with record proteins represent proteins Albumin and γ- Globulin processed by the US Sigma chemical company has been extracting proteins ratios examined by an optical density Densitometer scanner device Densitron type (PAN-FV) which gives the percentages for each protein. Used a randomized complete design Completely Randomized Design to study the effect of various treatments in the traits, and compared the moral differences between the averages using polynomial test Duncan (Duncan, 1955) and use statistical software ready SAS (SAS, 2010) to analyze the data.

Table 1. Composition of experimental ration

Ingredients (%)	Starter	Grower
	1 – 18 days of age	19 – 42 days of age
Yellow corn	58.5	63.5
Soybean meal (48% protein)	36	31
Premix (vitamins and minerals) mixture [1]	2.5	2.5
Sunflower oil	3	3
Total	100%	100%
Calculated chemical structure [2] (%)		
Crude protein	22.25	20.28
ME, Kcal / Kg feed	3108.15	3153.6
Lysine	1.46	1.33
Methionine + cysteine	0.87	0.83
Methionine	0.56	0.53
Calcium	0.71	0.70
Available phosphorus	0.78	0.77

[1] Premix production company Provimi for the manufacture of feed concentrates Jordan origin of Dai calcium phosphate, methionine, Colin chloride, vitamins and minerals, calcium carbonate, antioxidant, antifungal, anti Coxadia, salt

[2] Chemical structure was calculated according to the analysis of diet material found in NRC (1994).

Results and discussion

Notes from the table (2) the effect of adding different levels of milk powder Kefir to feed on blood serum proteins for broiler chicks aged ratios (six weeks), there were no significant differences in the proportion of protein Pre-albumin between experimental treatments, while there was improvement significantly ($P < 0.05$) for

the third treatment (0.4%) and treatment fourth (0.6%) in the proportion of albumin protein on the first treatment (control) and recorded the highest rate reached (21.87 and 21.92% respectively), while the first treatment recorded (control) the following percentage (20.64%) The second treatment (0.2%), there were no significant differences between them and the rest of the treatments .

But in the proportion of protein Post-albumin we note improvement the fourth treatment (0.6%) was significantly (P <0.05) on the first treatment (control) and the second treatment (0.2%) recorded the highest percentage of protein Post-albumin and total (15.22%), while the second treatment recorded (14.08%) and margin significantly (P <0.05) for the first treatment (control), which recorded the lowest percentage of protein and was (13.81%), while the third treatment recorded (0.4%) following value (14.63%) and without a significant difference from the fourth treatment and second. It is the same table we note the absence of significant differences between all the treatments in the proportion of protein α-Glob and β-Glob, where is the α-Glob protein and β-Glob of lipoproteins Lipoproteins in the blood serum as the transfer of fatty substances (Schumaker and Adams, 1969). Griffin and others have noted (1987) that the chicken meat is characterized by a high proportion of these proteins in the blood during the advanced ages of the ability to deposition of fat in comparison with chicken egg whites and perhaps due to the absence of significant differences in these ratios proteins to the lack of a significant effect of powdered milk Kefir in increased deposition of fat in the body. As for the immune protein γ-Glob we note the continued superiority of the third treatments and the fourth was significantly (P <0.05) on the first treatment (control) and the second treatment and recorded the highest rate of this protein was (31.57 and 31.25%) respectively , while the first treatment second treatment recorded the following .

Table (2) effect of addition different levels of dried Kefir milk to the ration in some ratio of serum proteins to broiler chicks (6 weeks)

Fourth treatment 0.6 %	Third treatment 0.4 %	Second treatment 0.2%	First treatment (Control)	Treatments / Parameters
1.42±0.04	1.36±0.05	1.37±0.06	1.33±0.02	**Pre-albumin**
21.92±0.16 a	21.87±0.11 a	21.11±0.17 ab	20.64±0.13 b	**Albumin**
15.22±0.05 a	14.63±0.03 ab	14.08±0.11 b	13.81±0.05 c	**Post-albumin**
11.93±0.06	11.87±0.01	11.66±0.05	11.52±0.03	**α-Glob**
6.97±0.09	6.93±0.06	6.84±0.02	6.87±0.07	**β-Glob**
31.25±0.14 a	31.57±0.24 a	30.46±0.16 b	30.38±0.19 b	**γ-Glob**

*Different letters within the same row indicate the existence of significant differences at the level of probability (p <0.05)

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