The Effect of *In Ovo* Exposition to Ethanol Upon Osteogenesis of the Chicken Embryo.

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ABSTRACT

Excessive alcohol consumption by a pregnant woman may delay foetal development and may cause malformations. In this study, the model of the chicken embryo to demonstrate the teratogenic effect of ethanol (33%) on the chicken osteogenesis on the 10th day of embryonic development have been used. 49 fertilized eggs were used in present investigation. Hence, different doses of ethanol were injected into the chicken embryos at 33% (20, 40, 80μl) in the air space at gastrulation and, on the other hand, an equivalent amount of the mentioned doses of distilled water were injected into the control-group eggs which was done once in every two days in order to maintain a high concentration in the blood. Experiments were repeatedly and independently carried out for three times. The eggs were incubated in a humid incubator at the temperature of 37.7 °C and at 60-65% of humidity. On the 10th day of incubation, the embryos were taken out and fixed in formalin at 10%. After that, the eggs were sectioned at 5μm of thickness with a Leica micrtome and, then, stained with the Hematoxylin and eosin. Histological examination has revealed that the exposition of chicken embryos to ethanol (33%) delays the skeletal development in a dose-dependent manner by reducing the length of the cartilaginous proliferation zone and hypertrophic zone during the bone formation period. Furthermore, under the effect of ethanol, the cell proliferation activities were repressed. In conclusion, present results indicated that using ethanol to treat chicken embryos at early stages caused considerable malformations and a decreased in the embryo survival rate. The exposition to alcohol affects the chicken osteogenesis in a dose-dependent manner.

Keywords: Chicken embryo, Ethanol, Malformations, Osteogenesis, Teratogenic effect
Aflatoxin induces stress and increases mortality rate during infection in poultry, especially broiler fed with a basal diet without aflatoxin contamination, group B with aflatoxin (> 1 ppb 51 ppb 101 Aflatoxin is a worldwide problem in poultry industries as it is known to contaminate poultry feed. Recent Update: Effects of Aflatoxin in Broiler Chickens. DOI: ABSTRACT

Conclusions: The lowest viability (61.89±4.3%) and percent of abnormal spermatozoa (23.42±4.7%) were obtained from the epididymis of group B, which was significantly different (p < 0.05) from the vas deferens. No significant difference was observed between the flushing and float-out methods. The characterization of Post-Mortem Sperm of Local Chicken Cocks in Eastern Algeria. DOI: ABSTRACT

The effects of feeding baker's yeast performance of Cobb 500 broilers were studied. Four nearly isocaloric and isonitrogenous starter and finisher rations were prepared. 240 chicks with an average initial body weight of 42g were randomly divided into 12 groups contained 4 treatments and 3 replications for each treatment. Treatment rations were containing 0, 0.5, 1.5 and 2.5% of baker's yeast. The hematological and serum biochemical parameters were evaluated. The Crude Protein (CP), Metabolizable Energy (ME) contents of baker's yeast were 48% and 3615 kcal/kg DM, respectively. The CP content of the rations during the starter and finisher phases were 22% and 21%, respectively. The CP and ME contents of the rations during the starter and finisher phases were 22% and 3100 kcal/kg and 3200 kcal/kg respectively. Feed intake during the starter phase and entire trial period was lower for T4, whereas during the finisher phase in control diet group showed the highest growth rate. T4 group showed the highest eviscerated percentages. Blood parameters results showed that fed broilers had higher hemoglobin, but no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, eosinophils, basophils, thrombocytes and mean corpuscular volume). The effects of feeding baker's yeast on the hematological and serum biochemical parameters of the broiler chickens were not significant. The effects of feeding baker's yeast performance of Cobb 500 broilers were studied. Four nearly isocaloric and isonitrogenous starter and finisher rations were prepared. 240 chicks with an average initial body weight of 42g were randomly divided into 12 groups contained 4 treatments and 3 replications for each treatment. Treatment rations were containing 0, 0.5, 1.5 and 2.5% of baker's yeast. The hematological and serum biochemical parameters were evaluated. The Crude Protein (CP), Metabolizable Energy (ME) contents of baker's yeast were 48% and 3615 kcal/kg DM, respectively. The CP content of the rations during the starter and finisher phases were 22% and 21%, respectively. The CP and ME contents of the rations during the starter and finisher phases were 22% and 3100 kcal/kg and 3200 kcal/kg respectively. Feed intake during the starter phase and entire trial period was lower for T4, whereas during the finisher phase in control diet group showed the highest growth rate. T4 group showed the highest eviscerated percentages. Blood parameters results showed that fed broilers had higher hemoglobin, but no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, eosinophils, basophils, thrombocytes and mean corpuscular volume). The effects of feeding baker's yeast on the hematological and serum biochemical parameters of the broiler chickens were not significant.
Against Challenge with Epidemic Newcastle Disease Virus in Egypt.

on feed and water intake as well as enhanced viability of chickens. And in regards to immune
inactivated Newcastle disease virus (NDV) vaccines genotype II or either non-vaccinated
deleterious effect on growth rate, weight gain, poultry viability and immune response.

Furthermore, weight gain, antibody response, mortalities, viral shedding and normal viability of chickens were estimated in order to assess the efficiency

Research Paper

Future studies should be applied with increasing microalgae percent in poultry feed broilers ration was studied. One hundred and twenty broiler chicks were divided into 6 groups of 20 birds, three of them have fed on balanced broiler ration supplied with 1% weight per weight

function and body weight, they have similar effect with the free microalgae groups in normal

Using microalgal biomass in animal diets has been studied recently. Many species of cultivated

compounds (population size, residue detection methods and positive case rates). All performed

strict selection criteria of data. The databases were searched quantitative inputs from the

Present study consisted of performing a meta-analysis on data about the detection of antibiotic

residues in meat of broiler chickens in developing international researchers. Then an advanced statistical analysis on collected data was done, the

antibiotic residue and detection methods and the reliability of the results obtained by the

protocol.

A Meta-Analysis on Antibiotic Residues in Meat of Broiler Chickens in Developing

residues in chicken meat achieved from all over the researches with a wide collection and very

antibiotic residues in meat of intensively broiler chicken farms (45.26% of the samples analysed

with the same vaccination treatment. Furthermore, weight gain, antibody response, mortalities,
viral shedding and normal viability of chickens were estimated in order to assess the efficiency

Conclusion dried microalgal biomass harvested from HRAP can be used in broiler ration with no
deleterious effect on growth rate, weight gain, poultry viability and immune response. In

Further studies on increasing microalgae percent in broiler ration is recommended.
Preparation of Necrotic Enteritis Vaccine for Turkey.

El-Sergany E, Hamed E-H, El-Sawy H, Medhat T, Yasser A and Alaa E-M.


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ABSTRACT

Clostridium perfringens is the most important cause of enteritis in domestic animals, in chicken and turkey it well known as pathogen responsible for necrotic enteritis; hepatitis, and cholecystitis. The disease in turkey characterize by either severe form with high rate of mortalities or subclinical form of reduce growth rate and increase condemnation rate. The major factor responsible for pathogenicity of Clostridium perfringens was alpha toxin. The aim of present study was to prepare of Clostridium perfringens alpha Toxoid vaccine for controlling the necrotic enteritis disease. The vaccine was prepared at different doses depend on lethality of toxin (24, 48 and 96 Minimum Lethal Dose) for controlling necrotic enteritis disease. Antibody titer elicited by vaccination was measured by toxin neutralization test, ELISA, and challenge test. It revealed that antibody titer expressed by international antitoxin unit per ml was 7.4, 4.1 and 1.26 respectively according to the mentioned dose, and also the protection percent against challenge was 100% when vaccinated with either 48 or 96 Minimum Lethal Dose, while it gave 80% when vaccinated with 24 Minimum Lethal Dose.It concluded that use of Clostridium perfringens alpha Toxoid with recommended dose of 48 MLD able to protect turkey for 6 months.

Keywords: Alpha toxin, Clostridium perfringens, Turkey, Type A, Vaccine