

ABSTRACT

The Study was carried out to find out the effects of different levels such as 2.5 % and 5 % of chrome shaving on growth performance of quail chicks. One day old chicks were purchased and fed with chrome shaving partially replaced by animal protein till up to 9th week. The effects of chrome shaving were studied in Total body weight, Weights of Liver, Kidney, Heart and Gizzard, blood haematology (Haemoglobin, TEC, TLC and PCV), Serology (Liver function enzymes and renal function enzymes), Body composition (Mineral, Moisture and fat estimation), Estimation of Chromium through Atomic Absorption Spectrometry and Histopathological changes in Liver, kidney, heart and Gizzard.

Result showing increase concentration of 5 % level in all parameters than 2.5 % level. The chicks and organs weight were increased up to 7th week but non significant in last two weeks. Dressing percentage, Fat contents and Mineral contents were decreased while Protein, Moisture and Chromium amount were significantly increased till 9th week. Serum enzymes both LFT and RFT were moderately significantly increased in both levels. Haematological parameters were also increased in both levels. Liver and Kidney showed severe damage in 5 % level in last two weeks but remain almost unaffected in first few weeks. While Gizzard and Heart remained normal but few histopathological changes were observed in the last two weeks. These all changes were time and dose dependent.

At the end it was concluded that different levels (2.5% and 5%) of chrome shaving partially replaced by animal protein showed different results on performance of quail chicks. Adverse effects can be seen in 5 % level when administered to quail chicks in last weeks.