

## EFFECTS OF VARIOUS LEVELS OF WHEAT SCREENING REPLACEMENT WITH OR WITHOUT PROCESSING ON BLOOD PARAMETERS BROILER CHICKEN

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### INTRODUCTION

Wheat screening as a by-product is obtained after grinding, sorting, cleaning Wheat and estimated in 6-10% of annual wheat production. Feed ingredients of plant origin contain a number of components that cannot be digested by monogastric species due to the lack of or insufficiency of endogenous enzyme secretions. The addition of water and exogenous xylanases could have enhanced the digestion of feed and absorption of nutrients.

### MATERIALS AND METHODS

A total of 540 day 29 old broiler chicks with 9 treatments and 6 replications were used. Various levels (0, 25 and 50%) of wheat screening with or without enzyme supplementation (0.6 g/Kg air-dry feed) and wet feeding (1.25:1 ratio water/ feed) were test diets. At 45 d of age, a blood sample was collected from two birds per replicate. Blood samples were collected on ice and centrifuged, and serum was stored at -20C until analysis.

### RESULTS AND DISCUSSION

The results indicated that serum glucose and protein value increased ( $p < 0.05$ ) in WS-based diets. Serum glucose value by 50% of WS-based diet to form wet higher compared with other levels. The effect of wheat screening with or without processing on blood parameters was not reported previously. The results have noted by Hajati (2010), that showed adding multi-enzyme to wheat based-diet significantly increased the concentration of blood total cholesterol. Awojobi *et al* (2011), reported that broilers on fed wet 1.5:1 ratio water/feed in wheat-based diets have highest serum glucose but not significant. Increased protein likely reason may be better amino acid balance wheat screening than corn. The addition of water could have enhanced the digestion of feed and absorption of nutrients, which in turn could have affected blood metabolite concentrations.

**Keywords:** wheat screening, enzyme, wet feeding,

### REFERENCES:

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