

## Hematological, histopathological and growth performance studies on albino rats fed on *mystus gulio* fillet with formulated cereal

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### ABSTRACT

The growth and development of human body is dependent on the protein, carbohydrate, vitamins and minerals. Fishes are one of the major sources of protein, vitamins and minerals for human. This study was conducted to know the effect of *Mystus gulio* fish fillet on growth performance of albino rats after feeding different concentrations of fish fillet as a protein source with formulated cereal for 32 days. Haematological and histopathological analysis were performed between control group and examined groups of albino rats. It was noticed that the body weight of each experimental albino rat was increasing gradually with increasing fish fillet up to 15% and beyond this the value was decreased. Moreover, the highest protein efficiency ratio (PER) and calorie efficiency ratio (CER) were observed 2.53% and 13.02% respectively for 15% supplied fish fillet. The gained in body weight (GBW) of albino rats in each experimental group depended mainly on supplied fish protein concentration but not on formulated cereal. According to hematological and histopathological studies, no toxicological effect was observed between control group and experimental groups of rats treated with different fish protein concentration for 32 consecutive days. Supplement of 15% fish fillet with formulated cereal was required to produce maximum nutritive values and the *Mystus gulio* could be considered as protein rich human diet.

### KEYWORDS

Growth performance; Toxicological effect; *Mystus gulio*; Nona Tengra

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