**GROSS AND HISTOLOGICAL STUDIES ON DUODENUM OF BROILERS**

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**A clinical report submitted by**

**(SABUJ KANTI NATH)**

Roll No: 2008/58,

Reg. No: 400

Internship ID: D-39,

Session : 2007-2008

Report presented in partial fulfillment for the Degree of

Doctor of Veterinary Medicine (DVM)

**Faculty of Veterinary Medicine**

**Chittagong Veterinary and Animal Sciences University,**

**Khulshi, Chittagong-4225**

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**ABSTRACT**

We studied anatomy and histology of duodenumof the digestive tract in postnatal growing broiler chickens with regard to their location, shape, size and weight. A group of five chickens, each at day 1 (D1), days 7 (D7), day 12(D12), day 24(D24ss)and days 34 (D34), total 5, were killed, their digestive tracts were dissected and described and shape, size and weight of different segments of duodenum were recorded. Samples of duodenum were prepared and stained with Haematoxylin and Eosin staining technique to study the histology under light microscope. The average length of duodenum were significantly higher in broilers at day 34(145.75µm) than that at day 24(145.2µm), day 12(132.6µm), day 7(127.2µm) and day 1(101.3µm). On the other hand, the width were significantly higher in broilers at day 34(21.24µm) than that at day 24(20.30µm), day 12(19.92µm), day 7(18.50µm) and day 1(17.30µm).In diameter of the muscle also maintain this sequence but villi/mm² are higher at day 1 (no.12) and lower at day 34(no.3) which has reverse relationship to length, width & muscle layer diameter.

**Keywords:** Anatomy, Histology, Duodenum, Postnatal growth, Broiler.

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