**TITLE: STUDY ON SLAUGHTER HOUSE CONTAMINATION AND PHYSICAL, CHEMICAL AND MICROBIAL ASSESSMENT OF RAW BEEF SOLD ON RETAIL SHOP IN CHITTAGONG METROPOLITAN AREA.**

**ABSTRACT**

The microbial, chemical (pH), and physical (Moisture %) quality of raw beef sold in five most popular market in Chittagong Metropolitan was assessed in order to ascertain its safetyness. The markets were Cornelhat, Riazuddin market, Pahartali, Jhautola and Wireless market. The total viable bacteria count, PH and moisture percentages of raw beef was used as index of quality. A total five samples were collected from the markets in a single visit and tested on the same date and same time. Mean Periodic organisms load that was conducted by total viable bacteria count (TVBC) was highest of the sample collected from Wireless market (22.23x106 CFU/gm), followed by Jhautola (12.10x106 CFU/gm), Riazuddin market (5.33x106 CFU/gm), Pahartali (5.06x106 CFU/gm) and Cornelhat market (4.07x106 CFU/gm) (Control of this study). The decreasing rate of pH also highest in the samples collected from the Jhautola and Wireless market comparing the other three markets. Water-holding capacity was lowest in the samples collected from Jhautola and Wireless market while control sample possess the normal level of moisture percentage. To wrap up, meat sample that was collected from the animal of minimum pre-slaughtering stress, free from infectious diseases, processed in a fairly hygienic condition and sold after freezing and chilling i.e. control group of this study, is safe for public health.

**Key word:** Raw beef, total viable count, pH,moisture percentages.

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