# Comparison of Meat Quality Traits of Scalded and Non-scalded Broiler Chicken Meat

S.T.T. Iromi, D.K.D.D. Jayasena
*Department of Animal Science, Uva Wellassa University, Badulla, Sri Lanka*

The aim of this work was to investigate the physicochemical and sensory characteristics of scalded (SBC) and non-scalded broiler chicken (NSBC) breast meat. Six birds were randomly selected from the processing line of New Anthoney's Farms (Pvt) Ltd before and after scalding process which used as treatments. Proximate composition of breast meat of each bird was determined as outlined by ADAC (1995). Measurement of color was determined by using a colorimeter (CR-410, Konica minolta, NIC., Japan). Measurement of pH was determined by using a pH meter (PH700, Eutech instrument, Singapore). Cooking loss was determined by heating the samples up to 85℃ for 30 min in a water bath (LWB-IIID, Daihan labtech Co.LTD., Korea). Analysis of variance was conducted by the (ANOVA) and the General Linear Model using SAS program version 9.1 (SAS, 2002, SAS Institute, Cary, NC, USA). Mean Separation was analyzed by Duncan's multiple range tests at $P<0.05$. SBC contained higher protein but lower fat content than NSBC and no differences in ash and moisture content. Lower fat content in SBC is, dissolve the fat in hot water used in scalding tank. L*, a* and b* values were not significantly difference ($p<0.05$) between NSBC and SBC. Higher pH values were shown by NSBC and no any significant difference of cooking loss in NSBC and SBC. In higher temperature, glycolytic potential will increase and more lactic acid will produce. That can be the reason for the high pH value in NSBC. It will reduce the ultimate pH of the carcass. Based on the results of the sensory analysis, there was a significant difference ($p<0.05$) in overall acceptability. Reason for this difference can be, a niche market (Buhari Hotel) existing for NSBC.

Keywords: Scalded, Broiler, Non scalded, Physicochemical, Sensory