BROILER CHICKEN PSE (Pale, Soft, Exudative) MEAT AND BRAZILIAN LEGISLATION ON WATER CARCASS LIBERATION DURING THAWING

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Brazilian legislation advocates that water content of maximum 6.0% in broiler chicken carcass should be carefully controlled in order to avoid the consumers to be deceived in its weights. However, it could lead to a fake interpretation if not recognizing possible non intentional water loss caused by meat physiological/biochemical abnormalities. The objective of this work was to investigate the PSE meat incidence and its relationship to chicken carcass water loss. The PSE examination was carried out in breast fillets (n=720) by pH and color (L*) values measurements in a commercial abattoir. Carcass samples were separated in PSE meat (n=59) and control samples (n=55). Water absorption and drip test were performed according to the legislation methodologies. Subsequently commercial whole frozen carcasses from 5 brands were purchased in local supermarkets (n=30) and they were analyzed in relation to pH, color, water holding capacity (WHC) and drip test. The PSE meat incidence in the summer season (53.0%) was higher in relation to winter (39.0%). Abnormal meats absorbed 3.59% of water during processing similarly to the control samples, however liberated 0.38% more water during thawing the carcasses. From the 5 brands evaluated, 3 of them presented drip values above 6.0%. The highest drip value was the brand sample that showed pH, color and WHC values characteristics of PSE meat. Thus, it can be postulated that PSE meat phenomenon promotes more water liberation during thawing leading to a misinterpretation in relation to the Brazilian legislation in relation to water carcass liberation during thawing.