

P-156

The occurrence of white striping in chicken breast meatMassimiliano Petracci, Samer Mudalal, Angelo Bonfiglio,
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White striping defect is an emerging poultry quality issue which has been described as the appearance of white striation parallel to muscle fibres on surface of pectoralis major muscles. Currently, there are no published references concerning the occurrence of this defect under commercial conditions. The purpose of this study was to determine the incidence of white striping defect in commercial strains of meat-type chickens reared and processed under intensive conditions. A survey was conducted in a major commercial processing plant on 28,000 broiler breast fillets (*pectoralis major* muscles) which were collected at random from 56 flocks during a 4-mo period (from June to

September 2012). Flocks consisted of meat-type chickens of both sexes belonging to some of the main commercial hybrids which were reared under intensive conditions and slaughtered from 45 to 54 d of age (average live weight: 2.75 kg). The evaluation of white striping occurrence (absence=normal, presence classified in 2 levels as moderate and severe) was performed on the processing line at 3 h post-mortem after the breast-deboning area. The total occurrence of white striped breast fillets was 12.0% (8.9 and 3.1% in moderate and severe degree, respectively). The range in the incidence of total white striping was fairly large and varied from 2.4 to 26.2% among flocks. Considerable variations were also observed for moderate (range: 2.4 to 18.6%) and severe (range: 0 to 8.8%) white striping degrees. When considering the influence exerted by genotype, high breast-yield hybrids had a higher overall incidence of white striping if compared with standard breast-yield strains (15.2 *vs* 10.0%; $P < 0.001$). This result was due to the higher incidence of white striping for both degrees of moderate (3.9 *vs* 2.6%; $P < 0.05$) and severe (11.3 *vs* 7.4%; $P < 0.01$) in high breast-yield birds. In conclusion, this study revealed the importance of white striping defect in the commercial production of broiler breast meat. Moreover, it is most likely that ever-increasing genetic pressure to improve breast yield in broiler chickens is involved in the emergence of this defect.