

Session 43: Effect of key husbandry factors on chicken meat and carcass quality

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Various production systems for meat chickens exist in practice, ranging from conventional broilers in intensive systems to organic broilers or dual purpose chicken production. These production systems vary in the degree of extensiveness, such as the applied stocking density, genetic strain (fast-versus slower- or slow-growing breeds), presence of environmental enrichment and the type of diet. In addition to differences between production systems with respect to sustainability, meat quality may also be affected by the production system. Meat quality refers to meat quality aspects, safety, authenticity, but also the extrinsic value of the product. As an example, slower-growing broiler strains are often housed in more extensive systems. Although these slower-growing strains may have a lower breast meat yield compared to fast-growing chickens, meat quality concerns typical for intensive production systems have reported to be smaller. Diet composition is another important factor for meat quality, affecting for example the meat fatty acid profile, but also meat yield and other quality aspects. In the present review the effect of four key husbandry factors on chicken carcass characteristics and meat quality has been studied to get more insight in the effect of these factors on meat quality aspects. The key husbandry factors were: stocking density, genetic strain, environmental enrichment and diet, and literature analysis included any possible interactions between these. This knowledge will help to improve intrinsic meat quality in meat chicken husbandry systems by applying specific husbandry aspects.

Scientific literature from 2012 and further has been screened. Most scientific papers were found for diet, followed by breed, enrichment and stocking density. Results will be presented at the conference.

