

Quality attributes of pork and processed products from fat breeds. Examples of local French breeds

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The quality of pork and processed products include several properties or attributes: safety, commercial (carcass and cuts value), sensory, nutritional, technological, convenience and image. Image covers ethical, cultural and environmental dimensions associated with the origin of pork and the way it is produced and processed. Quality of pork and processed products (especially dry-cured ham) from local fat breeds has been considered using this framework, mainly focusing on commercial, technological, sensory, nutritional and image attributes. Quality is built and can be improved, but also be impaired, at all steps along the chain starting from pig production (breed, feeding, rearing conditions, slaughter age/weight...) through transport and pre-slaughter conditions, processing techniques (drying, salting cooking...) up to consumption. Pig breeds that have not been selected for efficiency in lean meat production exhibit low production performance (growth rate, feed efficiency) and high carcass fatness, and usually high sensory and technological pork quality due to, among others, high intramuscular fat (IMF) content and water holding capacity. However, a wide variability of these quality traits has been observed among European fat breeds, but also within breeds. Production system can further differentiate quality of pork from local fat breeds by allowing animals to express their genetic potential for IMF deposition, or by modifying fatty acid profile of muscles and backfat, all traits of high importance for the sensory quality and typicity of meat and processed products. Thus, genetic x environment interactions are essential in the development of quality of pork and processed products from local fat breeds. A consumers' study has shown that providing information on pig breed and production system to consumers influence their hedonic perception of dry-cured ham, illustrating the interactions between sensory and image attributes. Altogether, this work illustrates the specific quality attributes of pork and pork products from local fat breeds. It also highlights that quality of these products should be considered in a broad, farm to fork approach, including the assessment of synergies or antagonisms between quality attributes by multi-criteria analyses.

Key words: pig breeds, production system, feeding, meat, processed pork products, quality attributes