Abstract

Reduction of NaCl content in restructured dry-cured hams: post-resting temperature and drying level effects on physicochemical and sensory parameters.

The effects of post-resting temperature (5 ºC, 15 ºC and 25 ºC) and drying level (low and high, corresponding to final water contents (w/w) of 57% and 50%, respectively) were evaluated in restructured dry-cured hams. The reduction of NaCl content, with and without the addition of K-lactate as NaCl substitute was also evaluated. Physicochemical and instrumental colour and texture (Stress Relaxation test) parameters and sensory attributes were measured. The main effects of reducing the NaCl addition from 30 g/kg to 15 g/kg in restructured dry-cured hams were the reduction of saltiness and the increase of $a_w$, proteolysis and softness. The addition of K-lactate (19.7 g/kg) contributed to reduce these effects. Hams from high drying level had a longer processing time and a higher proteolysis index, but lower water content and harder texture. The increase of post-resting temperature to above 5 ºC reduced the processing time and the metallic flavour, but at 25 ºC restructured hams were spoiled. Therefore, the problems due to the reduction of NaCl in restructured dry-cured hams can be reduced by adding K-lactate and drying at 15 ºC (after 3.5 months of resting at 5 ºC) until a final weight loss of around 45% is reached.