Technologies to shorten the drying period of dry-cured meat products

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Abstract

Dry-cured meat products are well-known for their unique sensory characteristics. However, the traditional process is very time consuming. The process can be shortened especially by accelerating the drying period, which is the most time consuming. This paper deals with some technological, safety and sensorial aspects for producing fermented sausages and dry-cured hams when the process time is shortened. Different techniques, such as temperature increase and thickness reduction, and the effects of some ingredients and additives are discussed. A Quick-Dry-Slice process based on a continuous system that combines both convective and vacuum drying could accelerate the drying of slices after the desired pH is reached in fermented sausages.

There are safety concerns when processes are shortened, but possible additional hurdles, such as the introduction of bacteriocin-producing starter cultures and high-pressure treatments at the end of the process, could reduce them. Methods to speed up the development of typical colour, texture and flavour and their limitations are also discussed.

Keywords: Fermented sausages; Dry-cured ham; Accelerated production; Technology; Safety; Sensory properties