

THE EFFECT OF HIGH PRESSURE PROCESS ON COLOUR OF DRY-CURED MEAT AT DIFFERENT WATER CONTENT

Comaposada J., Ferrini G., Arnau J., Gou P.

IRTA. Finca Camps i Armet. 17121 Monells, Girona, Spain

INTRODUCTION: Most changes in the colour of meat products are commonly referred to composition and processing conditions. High pressure processing (HPP) is a preservative technique that may change some sensorial parameters.

OBJETIVE:

To evaluate the changes in colour of dry-cured meat at different water contents when are subjected to HPP

MATERIAL AND METHODS:

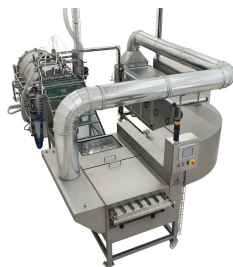
Preparation of stuffed salted minced pork

Raw pork minced (2 mm) was mixed under vacuum with salt, nitrate, nitrite, sodium ascorbate, transglutaminase and water



Dry cured processing

Slices of sausages were dried by QDS process® up to 20, 30, 40 and 50 % weight loss and then vacuum packaged (2 each dry level)



High pressure processing

500 MPa x 320 s at 13 °C Unpressurized samples (control)



Colour analysis

CIE Lab L*, a* and b* values were determined as indicators of lightness, redness and yellowness, respectively



RESULTS AND DISCUSSION:

The water content of samples ranged from 43 to 66 %. When water content decreased L* decreased and a* and b* values increased. At higher water content the HPP treatment increased L* and decreased a* and b*. At lower water content the effect of HPP treatment on colour was hardly apparent

