

IDEABRILL PACKAGING CAPABILITY IN THE PRESERVATION OF RAW AND COOKED HAM:

A COMPARATIVE STUDY

Acquaticci, L.¹, Kamgang Nzekoue, F.¹, Bailetti, L.², Angeloni, S.¹, Sagratini, G.¹ and Caprioli, G.¹.

¹School of Pharmacy University of Camerino, via Sant'Agostino 1, 62032 Camerino (MC), Italy.

² Italian Center for Sensory Analysis, Matelica (MC), Italy.

INTRODUCTION

Several studies demonstrate that active packaging, enriched of bioactive compounds like the essential oil of *Rosmarinus Officinalis* [1], and modified atmosphere packaging can positively influence the preservation of food. The study of new types of packaging is continuously increasing, mostly in terms of environmental impact and food preservation.

AIM OF THE STUDY

The aim of this study was to compare three types of packaging to assess their capability in the preservation of food.

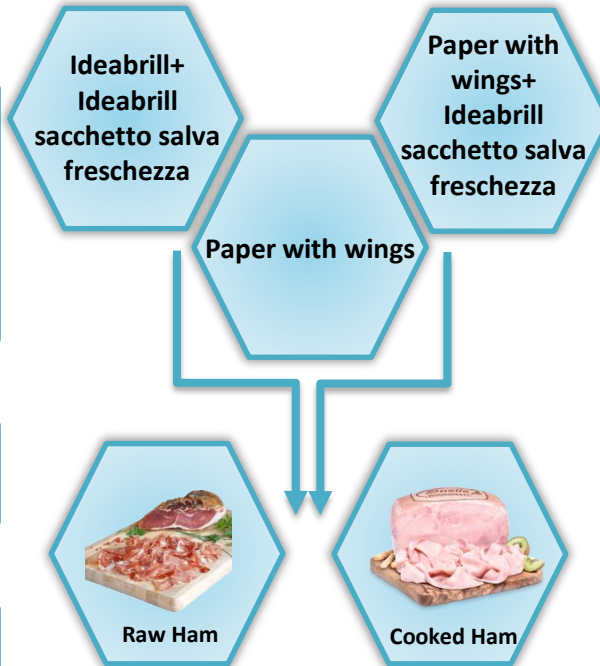
MATERIALS AND METHODS

Three types of packaging provided by Esseoquattro company were tested:

- *Ideabril*® packaging, a three layers pack of polyethylene high density layer, metallic layer and cellulose with long fiber layer, combined with *Ideabril*® *sacchetto salvafreschezza* (P1)
- *paper coupled with wings* (P2)
- *paper coupled with wings* combined with *Ideabril*® *sacchetto salvafreschezza* (P3).

The study was conducted on raw and cooked ham preserved in the packaging described above through the quantification of biogenic amines (BAs) at day 0, 3, 5 and 7.

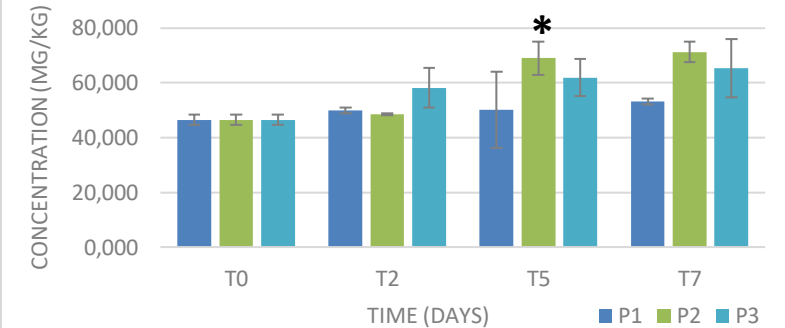
BAs were extracted, derivatized with dansyl chloride, purified with a SPE C-18 and then analyzed with an HPLC-DAD method.



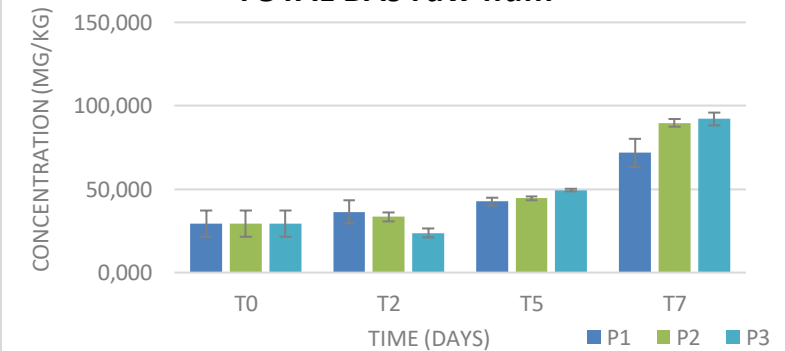
RESULTS

This study, in combination with sensorial studies, shows that *Ideabril*® packaging combined with *Ideabril*® *sacchetto salvafreschezza* showed the best conservation capability for raw and cooked ham when compared with others. Moreover from an eco-friendly point of view, *Ideabril*® packaging layers can be easily separated in order to encourage recycling.

TOTAL BAs cooked ham



TOTAL BAs raw ham



REFERENCES

- [1] Sirocchi, V., Caprioli, G., Cecchini, C., Coman, M. M., Cresci, A., Maggi, F., Papa, F., Ricciutelli, M., Vittori, S. & Sagratini, G. *International journal of food sciences and nutrition*, 64(8), 921-928, 2013.