

**THE EFFECT OF MODIFIED ATMOSPHERE PACKAGING
ON LIPID OXIDATIVE CHANGES IN TRADITIONAL
FERMENTED SAUSAGE (*PETROVSKÁ KLOBÁSA*)**

B. Šojić¹, N. Džinić^{1*}, Lj. Petrović¹, V. Tomović¹,
S. Škaljac¹, P. Ikonić², T. Tasić², M. Jakanović¹

¹⁾ University of Novi Sad, Faculty of Technology, Novi Sad, Serbia

²⁾ University of Novi Sad, Institute for Food Technology,
Novi Sad, Serbia

In this paper influence of modified atmosphere packaging on lipid oxidative changes, and sensory properties of odor and taste of the traditional fermented sausage (*Petrovská klobása*) during 7 months of storage were examined. TBARS value (2-thiobarbituric acid reactive substances) and sensory analysis of odor and taste were determined after drying process and during seven months of storage. Sausages were produced in controlled conditions and subjected to smoking, drying and ripening processes during 60 days. After that time, sausages were divided in two groups. The first one consisted of unpacked sausages, while the sausages from the second were packed under modified atmosphere (80% N₂/ 20% CO₂). During the storage period, TBARS value in modified atmosphere packaging sausages ranged from 0.15 mg MDA/kg to 0.40 mg MDA/kg, and these values were significantly lower (P<0.05), compared to unpacked sausages. After 5 and 7 months of storage, sausages packed in modified atmosphere had significantly higher (P<0.05) grades for sensory properties of odor and taste, compared to unpacked sausages. Results suggest that modified atmosphere packaging can be successfully applied to protect dry fermented sausages from lipid oxidation during investigated storage period.

Keywords: Traditional sausage, *Petrovská klobása*, lipid oxidation, TBARS value, odor and taste

* Corresponding author: natadzin@uns.ac.rs