

CONSUMERS' ACCEPTANCE AND PURCHASE INTENT OF LAMB MEAT WITH EDIBLE COATING AT BLIND AND INFORMED CONDITIONS

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I. OBJECTIVES

Packaging affects physicochemical and sensory characteristics of meat. The use of edible coatings is an alternative to extend the shelf life of meat, but consumer acceptance of this type of product is not widely investigated. In this study, lamb meat with chitosan edible coating was evaluated regarding consumers' acceptance and purchase intent in blind and with-label-information conditions.

II. MATERIALS AND METHODS

Longissimus muscles from male lambs obtained from a butcher shop were cut into 2-cm-thick steaks, randomized equally and distributed into 2 treatments: control (no coating) and coated with chitosan (1% w/v)/0.5% glycerol (w/v) solubilized in 1% lactic acid (v/v). The lamb meat was grilled (internal temperature, 80°C), salted (1 g sodium chloride), cut in cubes (1.5 cm of side), individually wrapped in aluminum foil, and kept warm at 60°C, in a controlled temperature oven. One-hundred and fifty-three consumers evaluated the samples using a 9-point (1 = disliked extremely; 9 = liked extremely) scale for sensory acceptance and a 5-point (1 = certainly would not buy; 5 = certainly would buy) scale for purchase intent. The control (noncoated) and chitosan-coated samples were served in a randomized order, in 2 sessions: blind condition (no label) and informed condition (with a label indicating the use of the chitosan coating). The obtained data were analyzed by analysis of variance. Cluster analysis by Ward's method was also performed to verify whether there were different groups according to the responses.

III. RESULTS

The control treatment (noncoated) and chitosan-coated in the blind condition showed the same values (7.2) and were higher ($P < 0.05$) than those from informed condition (6.3 for both treatments), indicating that the information in the label affected the product's acceptance negatively. Purchase intent values were the same (3.5) for chitosan-coated samples in the blind and informed conditions and lower ($P < 0.05$) than control samples, in both conditions, blind (4.0) or informed (3.8), indicating that label information did not affect this parameter, differently from sensory acceptance. After segmentation by cluster analysis, in group 1 ($n = 40$), the chitosan-coated with information sample showed the highest values ($P < 0.05$) for sensory acceptance (7.1) and purchase intent (3.9). In group 2 ($n = 52$), no difference ($P > 0.05$) was found for sensory acceptance between samples for both blind condition (noncoated = 7.9; chitosan-coated = 8.2) and informed condition (noncoated = 7.7; chitosan-coated = 7.8), and purchase intent was not different ($P > 0.05$) among all the samples, ranging from 4.2 to 4.3. Finally, in group 3 ($n = 55$), a significant difference ($P < 0.05$) was found between control samples in the blind (6.9) and informed (4.9) conditions, and the same for the chitosan-coated (blind = 7.1; informed = 4.4) samples for

sensory acceptance, but purchase intent was not different ($P > 0.05$) between control samples in the both conditions (3.9) and chitosan-coated samples (blind = 2.7; informed = 2.8).

IV. CONCLUSION

The label information affected sensory acceptance and purchase intent of chitosan-coated lamb meat, and according to cluster analysis, different consumer responses were found.

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