

EFFECT OF SALT CONTENT ON MICROBIOLOGICAL QUALITY OF DRIED BEEF SLICES

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In this study, the effect of salt content (0, 5, 10, 15 and 20 g/100 g dry basis) on the microbiological quality of beef slices was investigated. Beef slices were salted and vacuum-dried at 70°C, until a moisture content of 32% (dry basis). For microbiological analysis, a 10 g sample was homogenized with 90 mL peptone under aseptic conditions. Appropriate dilutions were prepared, and inoculation was performed by the pour plate method. After incubation, total aerobic mesophilic bacteria, total aerobic psychophilic bacteria, *Micrococcus/Staphylococcus*, lactic acid bacteria, *Enterobacteriaceae*, yeast and molds were enumerated. *Enterobacteriaceae* were not detected in all dried samples as a result of their sensitivity to heat and low water activity. The bacterial counts were below 5-log cfu/g in all dried samples, which indicating a general acceptance level of hygienic dried meat slices. The microbiological quality of the dried slices was affected ($P<0.05$) by the salt content. The increasing salt content from 0 to 20 g NaCl/100 g d.b, led to a significant decrease in the counts of total aerobic mesophilic and psychophilic. Additionally, the counts of *Micrococci-Staphylococci* were higher in almost all samples than those of lactic acid bacteria and yeast-molds.

Biography

Elif Aykin Dinçer has graduated from Ankara University, Faculty of Engineering, Department of Food Engineering in 2010. She has completed her MA from Süleyman Demirel University in 2013. Now, she is working as Research Assistant in Akdeniz University, Faculty of Engineering, Department of Food Engineering. Her research interests are Meat Science and Technology. She is working on her PhD thesis entitled, "Designing a cold dryer for producing a minimally processed dried meat and determining the drying and quality characteristics of obtained dried meat product".

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