



## THE EFFECTS OF SAUSAGE CASING WITH POTASSIUM SORBATE ON COLOUR, MICROBIOLOGICAL PROPERTIES AND FORMATION OF BIOGENIC AMINES OF DRY FERMENTED SAUSAGE (SUCUK)

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### ABSTRACT

The sausage casings were dipped into potassium sorbate (PS) solutions (PS0; 0% (Control), PS5; 5%, PS10; 10%, PS20; 20%) before filling and the effects of this treatment were investigated on the formation of biogenic amine (BA), microbiological and physical properties of sausage during the ripening (12 days) and refrigerated storage (4 °C, 30 days). The effect of PS treatment was not found to be significant on the pH values of the sausages. Yeast-mold and *Enterobacteriaceae* were detected only in the PS0 samples. The effect of PS treatment on the counts of total aerobic mesophilic bacteria, lactic acid bacteria and *Micrococcus/Staphylococcus* was found to be significant. Moreover, this effect on BAs except for spermine and spermidine was found to be significant. While PS treatment restricted the increase in tryptamine, 2-phenylethyl amine, putrescine, cadaverine, tyramine contents of sausages, it caused an increase in the formation of histamine. As the PS concentration increased, the redness (*a*) and yellowness (*b*) values of the sausages decreased while the lightness (*L*) values decreased in the PS20 samples.

### Keywords:

*Dry fermented sausage;*

*Sucuk;*

*Potassium sorbate;*

*Biogenic amine;*

*Colour;*