

Effect of Component and Shape of Rock Salt on the Quality of Fermented Sausage during Preparation

Yasuhiro Funatsu*, Katsuhiko Yamamoto*, Makoto Kawakami**

*Department of Food Science, Faculty of Dairy Science, Rakuno Gakuen University

**Hokkaido Food Processing Research Center

Summary

The purpose of this study was to evaluate difference in quality among various kinds of fermented sausages prepared with three different kinds of salts i.e. Common salt, Bolivian rock salt and German rock and starter cultures (*Pediococcus pentosaceus* (PP), *Staphylococcus xylosus* (SX), PP+SX). The sample without using bacterial culture was used as a control. There were no clear differences in physicochemical and taste properties such as pH and aw values, contents of salt, nitrite, free amino acid, adenosine-5'-monophosphate (AMP) and inosine-5'-monophosphate (IMP) during ripening among the samples. However, addition of 2.5% Bolivian rock salt induced color fluctuation such as decrease in lightness (L*) and yellowness (b*) and increase in redness (a*) of the fermented sausages during ripening. Lipid oxidation during ripening was greater in PP with common salt than in the other samples. Microbial flora and volatile components varied among the samples after ripening for 21 days.