

Title Effects of lactic acid and hot water treatments on *Salmonella* Typhimurium and *Listeria monocytogenes* on beef

Author Haydar Özdemir, Yeliz Yıldırım, Özlem Küplülü, Ahmet Koluman, Muammer Göncüoğlu and Gökhan İnat

Citation Food Control Volume 17, Issue 4, April 2006, Pages 299-303

Keyword Decontamination; *Salmonella* Typhimurium; *Listeria monocytogenes*

Abstract

The present study is designed to determine alone and combined effects of lactic acid (LA) and hot water (HW) treatments. Hot water and different concentrations of lactic acid were evaluated for their reduction effects on *Salmonella* Typhimurium and *Listeria monocytogenes* on contaminated beef during refrigerated storage at 4 °C. The reductions were 0.05–1.19 and 0.09–1.14 log for *S. Typhimurium* and *L. monocytogenes* on day 0 respectively, while it was 0.43–1.78 and 1.69–3.84 log respectively on day 5 of storage. Results of this study suggest that LA and HW treatments can be used to reduce *S. Typhimurium* and *L. monocytogenes* which provide an additional measure of safety in production line.