Title Chemical, sensory and shelf life evaluation of sliced salmon treated with salts of organic acids

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Citation Food Chemistry, Volume 101, Issue 2, 2007, Pages 592-600

Keywords Sliced salmon; Chemical quality; Sensory attributes; Shelf life; Sodium acetate; Lactate; Citrate

Abstract

This study was carried out to evaluate the shelf life, chemical quality and sensory attributes of salmon slices treated by dipping in 2.5% aqueous solution of sodium acetate (NaA), sodium lactate (NaL), or sodium citrate (NaC) during refrigerated storage at 1 °C. The chemical analyses demonstrated significant reduction in *K* value, hypoxanthine (Hx) concentration, total volatile base nitrogen (TVB-N), and trimethylamine (TMA) in treated salmon slices when compared with the control. Sensory scores of treated salmon were in a typical category for appearance, juiciness and tenderness compared with the control. Only minor changes in the sensory attributes were recognized by few panellists in NaA- and NaL-treated samples. A shelf life of 12, 12 and 15 days has been estimated for salmon treated with NaL, NaC, and NaA, respectively, versus 8 days for control. The salts of organic acids can therefore be used as safe preservatives for fish under refrigerated storage.