Abstract

In presented research the effect of salt intake is studied on chemical compositions, sensory properties and oxidative stability of Clupeonella cultriventris caspia fish through hot smoke process when ones to storage in refrigerator conditions. To achieve this, after initial prepare activities, samples were exposed in Brinning process within two salt concentrations of NaCl/KCl under 15% brine solution with 5 °C refrigerant process for 3 hrs. The smoking process included turning the samples into drying and hot smokes by slow and high rates of smoke set. All samples were tested by sensory analysis and salt intake concentration to select the nominated treatments in future. The results of chemical tests show that, there were not significantly differences in treatment1 (control, and salt NaCl/KCl with ratio 0 /100%) and treatment 2 (salt, NaCl/KCl with ratio of 25/75%) for amount of fat, moisture content, ash and an TBA indexes. Protein levels and salt intake were significantly increased while the TVB-N and PV indexes decreased in treatment 2. Microbiological tests were also confirmed that the rate of mold was significantly greater in treatment 2 that treatment 1 in the early days however being reduced later in both. Totally, number of 28 fatty compositions was identified. Palmitic acid (C16: 0) was significantly increased in treatment 2, however Oleic acid (C18: 1 cis) was reduced in treatment1. The sensory analysis produced that there were not significantly differences between two studied treatments. According to given results ones can replace sodium chloride with potassium chloride without negative effects on chemical, microbiological and sensory properties replace up to 25% for in hotsmoked tofu.

Key words: Hot smoking, *Clupeonella cultriventris caspia*, Lipid oxidation, Refrigerator storage



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Effect of salt composition on quality of hot smoked *Clupeonella cultriventris* caspia during refrigerator storage

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