

Abstract

The Purpose of the study, Using chitosan solution for heavy metals removal from Sole mince and its quality stability during refrigerator storage (4°C). Treatments in this study, minced meat and wash with water (Control treatment), minced meat and wash with chitosan 2% (treatment 2), minced meat and wash with chitosan 5% (treatment 3). metal concentrations (Cd, Ni, Pd and V) were measured on day zero. The amount of cadmium, lead and nickel in samples treated with chitosan 2% and 5% were lower than the control sample. The metals vanadium was zero in the control sample. Chemical parameters, antimicrobial were studied at 0, 3, 6, 9, 12 and 15. Results showed that in all treatments increased pH indicator. The increase in the period (15 days) in treatments 2 and 3 were lower than the control sample. PV index and TBA with time increased significantly ($P < 0.05$) in all treatments. Values of both variables with ash, protein, fat and water content was measured at day zero, treatments 2 and 3 were lower than the control sample. The results showed that the microbial shelf life of all treatments increased with respect to control and maximum survival time was observed in treatments 2 and 3. Conclusion that the use of chitosan for the removal of heavy metals shoes are also more persistence Minced fish was 15 days refrigerated storage at 4°C.

Key word: Heavy metal, Chitosan, Mince, Sole, Shelf- life



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