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Effect of chitosan on approximate composition indices and pH in beluga fillet (*Huso huso*) stored in freezer

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Abstract

The aim of this study was to investigate the effect of a natural additive called chitosan on changes of approximate composition indices (moisture, fat and protein) and pH in defrosted fish fillet (*Huso huso*). The study consisted of 2 treatments: chitosan-free treatment (control treatment) and 1% acid soluble chitosan treatment. Both treatments were stored at -18 °C for 4 months. Fillets were frozen and examined on day 0 (10 hour after freezer storage) and the second and fourth months. In terms of approximate composition, the use of acid-soluble chitosan significantly caused delaying the reduction the moisture, fat and protein content fish fillets compared to chitosan-free fillets during freezer storage. In addition, 1% acid-soluble of chitosan caused keep it low the pH of fish fillet during freezer storage compared to the control group.

Keywords: Approximate composition, Chitosan, Huso fillet, pH

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