



## **Freshness indicator; an index for qualitative evaluation of rainbow trout fillet**

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### **Abstract**

The use of freshness indicators in packaging is a method that has been considered in recent years to control health, quality and safety. In this study, freshness indicators that consisted of a range of color reagents were used in bags made of low density polyethylene (LDPE). And after placing the fish fillet, the door is closed and to evaluate the qualitative changes of the fish fillet from chemical and microbial tests, systematically at intervals of 0, 5, 10, 15 and 20, also by observing the color change of the indicators. Results after data analysis with SPSS 18 software, from the relationship between the results of chemical and microbial evaluation with color change of indicators, The Shelf life of rainbow trout fillets with smart packaging, it was estimated at 12 to 15 days.

**Keywords:** Freshness indicator, Rainbow trout, Quality, Shelf- life