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## Evaluating the chicken fillet corruption packaged with active coatings stored at the refrigerator temperature using bromothymol blue smart indicator

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Poultry is to a rather high extent perishable and will quickly become rotten if kept in inappropriate conditions. Using active antimicrobial coating is one of the methods for prolonging the shelf life of such products. In this study, a sample of uncoated chicken fillet was used as control sample and another chicken fillet samples with active antimicrobial coatings of chitosan and an active chitosan-nissan coating were used as the experimental sample. The chicken fillets coated with the above-mentioned active coatings were packaged to prevent contamination with conventional cellophane and the smart indicator, as the color indicator of bromothymol blue in this study (5 ml indicator was added between the two layers of cellophane in 5×6 dimensions), was packaged in both packages containing chicken fillet with active coating and the control sample without active coating. Then, the samples were stored at 4°C for seven days and the microbiological tests (total bacterial count) of TVN and pH tests were performed for 1, 3, 5 and 7 days. Finally, the relationship between these tests and the change in the color of chicken fillet was investigated. The results of this study indicated that the Bromothymol blue color at the pH range of 6-7, being blue in alkali pH and yellow acidic pH, can be used for evaluating the chicken fillet corruption packaged with active coatings.

### Biography

Bahareh Sotoudeh has completed her PhD from North Tehran University. She has worked as a Professor at the Islamic Azad University, Varamin. She has published more than 5 papers in different journals.

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