

for fish cutlet reduced significantly with increase of storage period. The ideal shelf life for storing the fish cutlet in refrigerated condition was found 14 days.

Keywords: Fish cutlet, TVB-N, FFA, PV



SMART PACKAGING OF SEAFOOD- A REVIEW

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This review paper deals with various smart packaging material used in food industry. Packaging plays a significant role in food supply chain. Packaging provides an external barrier to the food products and extends the shelf-life. The packaging material commonly used is plastic and its derivative forms due to its flexibility and durability. The non-biodegradable nature of plastic has made researchers focus on bio-based packaging material. Antimicrobial packaging is an area of interest for several years. This paper focus on using natural agents. The usage of different materials like polymers, polymers with plant extract, nano-composites, nano-composites with polymers, plant extract, acids salt and their anhydrides, enzymes are discussed. This would enhance the antimicrobial property of the fish products, by constructing one more hurdle to microbes. It aims to reduce, inhibit, and retard the growth of spoilage or pathogenic microorganisms in the packaged food. The principle action of antimicrobial films is based on the release of antimicrobial entities into the food which extends the lag phase and reduces the growth phase of microorganisms in order to prolong shelf life. Antimicrobial property can be introduced either in the form of sachets or edible films/coatings. Plant extracts possess antimicrobial property which can be added to the packaging material. Polymers like chitosan, gelatin possess natural antimicrobial property along with the usage of nano-particles. Extracts obtained from spices, herbs, or food processing by-products, such as barley husks, pomegranate peel, and olive leaves, have been reported to exhibit antioxidant activity as well, enabling their utilization as food additives. The additional usage of antimicrobial films other than protecting from microbial contamination is also discussed in the review.

Keywords: Packaging, Antimicrobial packaging, smart packaging, Polymers, Natural agents.



HISTAMINE REDUCTION MEASURES IN SEAFOOD INDUSTRY – A REVIEW

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