

Microbiological Assessment of Fish Sausages Coated with Smoked-Edible Film, and Stored in Room and Refrigerator Temperatures

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Abstract : Fish Sausages became popular nowadays, because of high nutritious and low in cholesterol. However, this food is also highly perishable and often contaminated by pathogen bacteria. Edible film was made from myofibril of Black Marlin (*Makaira indica*) waste, with addition of liquid smoke 0.8%. The aim of this study were to determine the TPC, total coliform and *Escherichia coli* in fish sausages coated with smoked edible film, and stored in room temperature (26-29oC), and refrigerator (5-10oC). Results shown that TPC in fish sausages coated with smoked edible film were lower than that of without coated, both for storage in room temperature and in refrigerator. Total coliform in coated with smoked edible film and stored in room temperature ranged between 7-120 MPN/g (1-4 days), while stored in refrigerator ranged between 7-93 MPN/g (1-6 days); while fish sausages coated with edible film without liquid smoke were 7-240 MPN/g (1-4 days) in room temperature, and 7-150 MPN/g in refrigerator. Total *E. coli* of fish sausages coated with smoked edible film and stored in room temperature ranged between 3-4 MPN/g (1-4 days), while stored in refrigerator ranged were 3 MPN/g (1-6 days); while fish sausages coated with edible film without smoked both stored in room temperature and in refrigerator, shown total *E. coli* 3 MPN/g during 4 days in room temperature, and 6 days in refrigerator. Total *E. coli* of sausages without coated stored in room temperature ranged between 7-24 MPN/g, and that of stored in refrigerator ranged between 3-4 MPN/g.

Keywords : smoke liquid, edible film, coating, sausages

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