

The effect of olive oil as a poaching medium for triggerfish (*Canthidermis maculata*) on shelf life and the sensory acceptability

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Olive oil is a more healthy and nutritious oil as an essential constituent inexpensive food recipes in the world. Fish poaching in olive oil is a gentle cooking method that increases the food quality and also extends the shelf life. Triggerfishes (*Canthidermis maculata*) are an abundant fish in Sri Lanka, but low demand with the local recipes. Olive oil was used to improve sensory quality and anti-microbiology of triggerfish chunks stored at 32 ± 2 °C. Smaller chunks were oven poached at 105 °C for 15 minutes (water-poached and olive-poached) and aseptically kept immersed in that of each 20 mL of olive oil and water. Three triggerfish chunks of each medium were homogenized and suspended at regular time intervals (0, 36th hr and 72nd hr) and serial dilutions were performed for total plate counts (TPC). The sensory acceptability evaluations were carried out by 20 untrained panelists with the nine points hedonic scale (1-poor to 9-excellent) for appearance, odor, texture and taste of the fish poaching in olive oil. Olive-Poached triggerfish chunks at 36th hr and 72nd hr showed a slight reduction ($p>0.05$; two sample t-tests) in TPC (and) than in water-poached chunks (log CFU/g and) at the same times. The mean sensory acceptability scores of olive-poached triggerfish chunks (36th hr) in respect of appearance, odor and texture were significantly higher ($p<0.05$) than in water-poached triggerfish chunks. The olive- poached triggerfish chunks also demonstrated the positive effect on shelf life extension while stabilizing the quality. These may increase the value addition for triggerfish products.

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