



RESEARCH ARTICLE.....

## A study on the quality changes during baking of Indian mackerel, *Rastrelliger kanagurta*

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**ABSTRACT.....** Indian mackerel, *Rastrelliger kanagurta*, available along Odisha coast in abundance was considered for baking and effect of baking on quality changes has been studied in the present paper. The dressed fish pieces of 50 to 60 g each were marinated with spice mixture at room temperature for 1hr for spices to penetrate into the fish muscle. The heat processing time of fish pieces were standardised for 75 min at 15 psi (121.2°C) so as to make the fish bones soft and palatable. Baking time was standardised at 160°C for a period of 60 min. The proximate composition of fish and baked fish revealed that moisture content decreased by 20.65 per cent whereas crude protein and lipid content increased significantly by 59.28 per cent and 19.56 per cent, respectively ( $p < 0.05$ ). The chemical and microbiological changes due to baking the fish were also analysed and discussed. The organoleptic evaluation of baked mackerel fish samples was conducted in a 5-point hedonic scale. Besides, the softness of the bones its palatability improved the overall acceptability of baked product to a higher degree.

**KEY WORDS.....** Baking, Mackerel, Quality changes

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