

**ANALYZE HISTAMINE LEVEL IN VARIOUS  
POSITIONS OF HISTAMINE DEVELOPED TUNA  
FISH**

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by

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## Abstract

Histamine is a simple chemical substance which is derived from Histidine by the enteric bacteria. Presence of high Histamine in fish meat causes allergic conditions to the consumers. Fair knowledge of Histamine levels in various positions of Tuna fish increases the probability of selecting good quality fish with low Histamine level. Objectives of this study were to analyze the Histamine levels in various positions of Histamine developed in Tuna fish, to find out the effectiveness of Histamine knowledge related to the positions of Tuna fish currently used in industry and to acknowledge the fish processing companies to minimize the income losses. Histamine levels of 30 individual fish were analyzed by ELISA method. 3 positions of each fish were subjected to be analyzed. After preceding a questionnaire type survey with fifteen fin fish processing companies in Sri Lanka, three positions of Tuna were selected to take the samples for analyzing histamine levels. Based on the highest mean levels of each position, the best position to taking histamine test was selected. In the belly area of Tuna fish has the highest Histamine level with 25.74 ppm mean value and the tail area of Tuna fish has the lowest Histamine level with 9.20 ppm mean value. Results of these studies indicate that the best position to take sample for Histamine test from Tuna fish, is near the belly area and taking sample from the tail area of Tuna fish has low effectiveness. According to the results there is no significant difference among Histamine level in the belly area of Tuna fish and Histamine level beneath pectoral fin of Tuna fish. Further studies need to be carried out to investigate the relationship between Histamine levels of Tuna fish and the different fishing areas of the Sri Lankan Ocean.