

HISTAMINE IN IMPORTED FISHERY PRODUCTS.

BY

A. SASIKALA (B.Sc.)

Department of zoology  
University of Kelaniya.  
Kelaniya  
Sri Lanka.

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#### ABSTRACT.

In Sri Lanka allergic reactions are found when consuming canned fish, Maldivian fish and dried fish. Imported Maldivian fish, dried fish and canned fish were tested for histamine contents using fluorometric method. The flesh and juice in canned fish were separately analysed. Different types of canned fish packed in different media, having different net weights and belonging to different brands with different expiry dates were analysed.

*The mean histamine concentrations in Dace and Mackerel were found to be significantly higher than that of other fish species tested. Canned Mackerel had the highest mean histamine concentration (135.57 mg/Kg).*

Among the species other than the Mackerel and Dace, the highest mean histamine contents was found in flesh of canned Maldivian Tuna (45.69mg/Kg) and Kipper had the lowest mean histamine concentration in flesh (12.55mg/Kg) and in juice (6.15mg/Kg) respectively. In juice, Jack mackerel had the highest mean histamine concentration (28.02 mg/Kg).

The flesh of fish packed in fish oil had the highest mean histamine content (45.69 mg/Kg) and those packed in brine had the lowest value (7.47mg/Kg). The juice of fish packed in sunflower oil had the lowest mean (9.43 mg/Kg), and those packed in Natural juice had the highest mean (28.02 mg/Kg) histamine concentrations.

The highest mean histamine content in flesh (41.10 mg/Kg) and in juice (25.27mg/Kg) were obtained with the expiry dates in year 2000 and year 2003 respectively. The lowest

mean histamine content in flesh (26.62 mg/Kg) and in juice (21.78 mg/Kg) were obtained with the expiry dates in year 2003 and year 2002 respectively.

Mean histamine content of the juice in the cans of 155g was significantly differed with the cans of 425g and 120-125g. The cans of 120-125g had the lowest mean histamine content in flesh (26.08 mg/Kg) and in juice (10.37mg/Kg) respectively. Canned fish of net weight 180-190g had the highest mean histamine concentrations in flesh (42.19 mg/Kg).

All imported Maldivian fish and dried fish had the mean histamine concentrations above 100 mg/Kg.

To the consumers especially to those who show allergic reactions, it is advisable to purchase fish named Kipper. The brands of the canned fish prepared for the developed countries (with the English names only) are preferable for them.

Canned fish of Mackerel, Dace, a few samples of Tuna and some canned fish packed in natural juice and vegetable oil, were found to contain histamine contents of more than 100mg/Kg and hence it is inadvisable to consume these samples, and if, during consumption, some preventive measures like taking antihistamine is to be administered. Among the dried fish considered, consumers are recommended to use Sprats than Balaya, and Catfish is the best out of all.