

**HISTAMINE CONTENT IN SURIMI
STORED AT DIFFERENT TEMPERATURES**

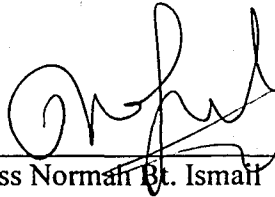
AZRA BINTI ABDUL HALIM

**BACHELOR OF SCIENCE (Hons.) FOOD QUALITY
MANAGEMENT
FACULTY OF APPLIED SCIENCES
UNIVERSITI TEKNOLOGI MARA**

2004

APPROVAL SHEET

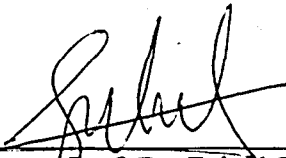
Final Year Project entitled “ Histamine Content in Surimi Stored at Different Temperatures” submitted by Azra Binti Abdul Halim, in partial fulfillment of the requirements for the degree of Bachelor Science (Hons.) Food Quality Management, in the Faculty of Applied Sciences and was approved by



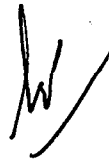
Miss Norman Bt. Ismail

Supervisor

B. Sc. (Hons.) Food Quality Management
Faculty of Applied Sciences
Universiti Teknologi MARA



Assoc. Prof. Dr. Zainal Samicho
Head of Programme
B. Sc. (Hons.) Food Quality Management
Faculty of Applied Sciences
Universiti Teknologi MARA



Assoc. Prof. Dr. Ahmad Sazali Hamzah
Dean
Faculty of Applied Sciences
Universiti Teknologi MARA

26 APR 2004

Date: _____

ACKNOWLEDGEMENTS

In the name of Allah, The Most Gracious and The Most Merciful, thousand thanks to Allah for his kindness and giving me the strength to finish up this project paper.

I would like to express my greatest appreciation and thanks to my supervisor, Miss Normah Ismail, who has helped make this thesis possible and successful. Besides that, thanks are also due to my Head programme, Assoc. Prof. Dr. Zainal Samicho, who has given the support regarding this thesis.

I would like to extend my gratitude to the laboratory assistants, Puan Norahiza, En. Osman, En. Azli, En. Omar and assistant lecturer Cik Hariyah Hashim for their support and help. Special thanks are also forwarded to all my friends especially my classmates and roommates for their kindness and generous assistance throughout this study and also those who had contributed either directly or indirectly to this thesis. Not forgetting, special thanks to Khairul Faizi Bin Yussof for his generosity in helping me making this thesis possible.

And last, but not least a very special thanks goes to my beloved parents for their constant encouragement, moral support, advice and also financial support to make this thesis possible and worth while. I sincerely dedicate this to them and hope that my effort will be blessed by Allah s.w.t.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER	
1.0 INTRODUCTION	1
2.0 LITERATURE REVIEW	4
2.1 Surimi	4
2.2 Histamine	6
2.3 Histamine Studies	7
2.4 Scombroid Poisoning/Histamine Fish Poisoning (HFP)	10
2.4.1 The Production of Histamine in Spoiling Fish	12
2.5 Factors Affecting the Probability of Histamine Fish Poisoning Occurring	13
2.5.1 Post Catching Contamination	13
2.5.2 Temperature Abuse on Fishing Vessels	14
2.5.3 Inadequate Chill-Storage Procedures	15
2.5.4 Inadequate Freezing and Thawing	15

ABSTRACT

High Performance Liquid Chromatography was used to determine the amount of histamine in surimi. Surimi was processed using two different types of fish, which are Threadfin Bream and Long Tail Tuna. The surimi was analyzed on day 1, day 3, day 5, day 7 and day 9. All the samples were stored in different storage temperatures which were 25°C, 4°C, -4°C and -18°C. It was found that surimi made from Threadfin Bream was best stored under -18°C storage temperature. From the results obtained, it showed that the histamine content was below the regulated level, which is 100ppm. However, surimi made from Long Tail Tuna had a similar result to the surimi made from Threadfin Bream. Both of the surimi was best stored under -18°C storage temperature.

It can be concluded that -18°C is the best storage temperature for surimi made from Threadfin Bream and Long Tail Tuna.