

**DEVELOPMENT OF FISH SAUSAGE  
WITH  
ADDED VEGETABLES**

BY

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Thesis submitted to the University of Sri Jayewardenepura as  
the partial fulfillment requirement for the award of the Degree

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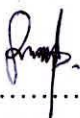
Food Science and Technology

## Declaration

The work described in this thesis was carried out by me under the supervision of Prof. Arthur Bamunuarachchi ( Department of food science and technology, university of Sri Jayawardenepura, Nugegoda, Sri Lanka) and Mrs. Indira Wickermasinghe (Department of food science and technology, university of Sri Jayawardenepura, Nugegoda, Sri Lanka). I declare that this report or any part of the report has not been submitted, presented or accepted in any previous applications for another degree.

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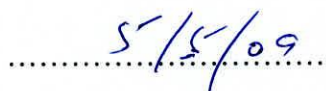
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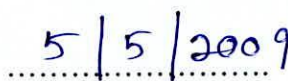
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## TABLE OF CONTENT

Page No.

LIST OF CONTENT	1	
LIST OF TABLES	11	
LIST OF FIGURES	111	
LIST OF PLATES	1V	
ACKNOWLEDGEMENT	V	
ABSTRACT	VI	
CHAPTER 01	INTRODUCTION	
1.1	Aim of the investigation	01
1.2	Overall objectives of the study	03
CHAPTER 02	LITERATURE REVIEW	
2.1	History of sausages	04
2.2	Classification of sausages	04
2.2.1	Fresh sausage	05
2.2.2.	Uncooked smoked sausage	05
2.2.3.	Cooked Sausage	05
2.2.4.	Dry and semi dry Sausage	06
2.2.5.	Frankfurters	06
2.2.6	Fermented sausage	06
2.2.7.	Skinless sausage	06
2.3	S.L. Standard for sausage	08
2.4	Fish sausage	08
2.5	status of the fish industry in Sri Lanka	08
2.6.	Marine Fish production in Sri Lanka	09
2.6	Types of fish	10
2.6.1.	Large pelagic fish	10
2.6.2	Small pelagic fish	10
2.6.3.	Large demarsal fish	10

2.6.4. Small demarsal fish	10
2.7 Structure of fish muscle	11
2.9. Composition and nutritive value of fish	11
2.9.1. Moisture	13
2.9.2 Protein	13
2.9.3 Fat	13
2.9.4. Carbohydrates	14
2.9.5 Vitamins	14
2.9.6. Minerals	15
2.10 Ingredients and additives for fish sausages	15
10.1 Fish	15
10.2 Curing Agents	16
10.2.1. Sodium chloride	16
10.2.3. Polyphosphates	17
10.2.4. Monosodium Glutamate	18
10.2.5. Spices	18
10.2.6. Starch	19
10.2.7. Sugar	20
2.10.8. Other Additives	20
2.10.8.1. Preservstives	20
2.10.10. Water	21
2.10.11. Fat Emultion	21
2.10.12. Vegetable Fat	21
2.10.13 Sausage Casings	22
2.10.14. Milk protein	22
2.10.15. Binders and extenders	23
2.10.16.Soy protein extenders	23
2.11. Addition of Vegetables	24
2.11.1 Mushroom	24
2.11.1.1. Nutritive value of oyster Mushroom	25
2.11.1.2. Medicinal value of mushroom	25
2.11.1.3. Mushroom poisoning	26

2.11.2.	Kohila	26
2.11.3..	Carrot	28
2.12.	Blanching of vegetables	29
2.12.	Dietary fats and health	30
2.12.1.1.	The effect of fat on health	30
2.12.2.	Dietary fat requirements and intake	31
2.12.3.	Trend of the low fat products developed	31
2.12.4.1.	Dietary lipids and colonic cancers	31
2.12.4.2.	Dietary fats and breast cancer	32
2.13.	Dietary fiber and health	32
2.13.1.	The properties of fiber	32
2.13.2	Dietary fiber requirements and health benefits	33
2.13.3.	The trend of fiber rich foods	33
2.13.5.	Fibrous substances in common food	33
2.13.5.1	Cellulose	33
2.13.5.2	Hemi-cellulose	34
2.13.5.3	Gums	34
2.13.5.4	Pectic substances	34
2.13.5.5.	Lignin	34
2.13.5.2.	Miscellaneous Polysaccharides	35
2.13.6.	Mushroom fiber	35
2.13.7.	Crude fiber and dietary fiber	35
2.13.7.1.	Crude fiber	35
2.13.7.2.	Dietary fiber	35
2.14.	Physiological effect of fiber	36
2.15...	Quality characters of sausages	36
2.15.1.1.	Color	37
2.15.1.2.	Appearance	37
2.15.3.	Texture	38
2.15.4.	Flavor	38
2.15.5.	Water holding capacity	38
2.16.	Analysis of food components	39
2.16.1	Analyzing of moisture content (AOAC:1984)	39

2.16.2	Analyzing of crude fat (AOAC : 1984)	39
2.16.3.	Analyzing of crude protein (Anon:1980)	39
2.16.4.1.	Analyzing of Total Ash (Anon:1980a)	40
2.16.5.	Analyzing of free fatty acid (Anon: 1992a)	40
2.16.6.	Analyzing of Peroxide Value (anon b: 1992)	40
2.16.7.1.	Analyzing of pH value (Pearson's: 1987)	41
2.17.	Sensory Properties	41
2.18.	Sausages Production Procedure	41
2.18.1.	Grinding	42
2.18.2.	Mixing	42
2.18.3.	Chopping	42
2.18.4.	Emulsifying	43
2.18.5	Stuffing.	43
2.18.6.	Linking and typing.	43
2.18.7.	Smoking and cooking	43
2.18.8.	Chilling	44
2.18.9.	Peeling and packaging	44

### **Chapter 03 Materials and Method**

3.1	Location of the study	45
3.2	Recipes of the Trials	45
3.2.1.	Preparation Process of Raw Materials	46
3.2.1.1	Fish	46
3.2.1.2	Vegetables	46
3.2.1.2.1	Other Ingredients	47
3.3	Instruments and Equipments	47
3.4	Preparation of Sausage	47
3.4.1	Mincing	47
3.4.2.	Chopping	47
3.4.3.	Stuffing	47



3.4.4. Cooking	48
3.4.5. Showering and Peeling	48
3.4.6. Packaging	48
3.5. Microbiological Analysis	48
3.5.1. Determination of Total Plate Count (TPC)	48
3.6. Chemical analyses	49
3.6.1. Determination of Moisture (Pearson's 1985)	49
3.6.2. Determination of Crude Fiber (Pearson's 1985)	49
3.6.3. Determination of Crude Fat (Pearson's 1985)	51
3.6.4. Determination of Crude Protein (Pearson's 1985)	51
3.7 Determination of Keeping Quality	53
3.7.1 Determination of Peroxide Value	53
3.7.2 Determination of free fatty acids (Anon:1992)	54
3.7.3 Determination of pH (Pearson's: 1987)	55
3.8 Determination of Sensory Evaluation	55
3.8.1. Testing area	56
3.8.2. Testing setup	56
3.8.3. Preparing samples	56
3.8.4. Serving temperature	56
3.8.5. Utensils	56
3.8.6. Number of samples	56
3.8.7. Coding and order of presentation	56
3.9. Statistical analysis of data	57

## **Chapter 04 Results and Discussion**

4.1 Chemical Analysis	58
4.2 Microbiological Analysis	59
4.3 Results of keeping quality	54
4.3.1 pH Value	60
4.3.2 FFA Value	61
4.3.3 Peroxide Value	62
4.4 Sensory Evaluation	64

4.4.1	Appearance	64
4.4.2	Color	65
4.4.3	Texture	65
4.4.4	Flavor	65
4.4.5	Odor	66
4.4.6	Juiciness	66
4.4.7	Slicing ability	66
4.4.8	Overall Acceptability	67
<b>Chapter 05</b>	<b>Conclusions</b>	<b>68</b>
References		69
Appendix – 1	Sensory Evaluation Card for Hedonic Test	
Appendix – 11	Tabulated category scores for hedonic test to find more preferable sausage sample	
Appendix – 111	Determination of more preferable sausage sample	

## LIST OF TABLES

Table No.	Page No.
Table 2.1 S.L.S Standard for sausage	07
Table 2.2. Fish production of Sri Lanka	09
Table .2.3 The composition of fish meet	12
Table 2.4 Ingredients used in Fat emultion	21
Table 2.5 Proximate composition of edible mushrooms	25
Table 2.6 Nutritional composition	28
Table 2.7 Nutritional Value of Carrot	29
Table 3.1. Recipes of the Trials	46
Table 4.1. Results of the Chemical Analysis	58
Table 4.2 Results of the Total Plate Count	59
Table 4.3 Mean values of sensory evaluation test	64

## LIST OF FIGURES

Table No.	Page No.
Figure 4.1. pH Value of sausage samples during storage period at $-04^{\circ}\text{C}$	60
Figure 4.2. FFA Value of sausage samples during storage period at $-04^{\circ}\text{C}$	61
Figure 4.3. Peroxide Value of sausage samples during storage period at $-04^{\circ}\text{C}$	62

## LIST OF PLATES

Palate No.	Page No.
Palate 01 Developed sausage in the Wet form	73
Palate 02 Developed sausage in the Dry form	74

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Title – Development of Fish Sausage with added Vegetables

Premakeerthi P.K.W.H.

## ABSTRACT

Fish protein is increasingly favored over meat proteins because of low fat content presence of omega-3 Fatty acids and less social religious stigma attached to the usual use of fish etc.. Many underutilized species of fish following filleting operations could be utilized for further processing of high quality protein products. For the last few years that pressure to reduce the fat content of our diets and to consume healthier food has become increasingly strident. Demand for instant food products, such as sausages with having nontraditional ingredients have been increasing over recent years. The objectives of this study were to prepare a novel fish based low fat sausages with added fiber. Two samples of the sausages were prepared by changing the method of addition of ingredients as dry and wet form. It was prepared by collecting locally available fish and one other ingredient. Panelists selected as the sample of the sausages which prepared in wet form. Samples were kept under-4°C condition and quality evaluation was carried out twice a month and other analyses were carried out according to the requirement.

Highest value the obtained for crude protein (16.83%), crude fat (06.35%), crude fiber (03.67%) and moisture (36.54%) for the sample which is prepared in wet form.

Microbiological analysis revealed that the total plate count was also lower ( $10^3$ ) than the accepted level ( $10^6$ ) and it was found that the product was microbiologically safe.

pH value, FFA and Peroxide values were also not significantly increased ( $P < 0.05$ ) with compared to the other tested sample.

There were significant difference ( $P < 0.05$ ) reported for the sensory parameters, ie. For overall acceptability (04.6), appearance (04.2), color (04.5), texture (04.3), for the sample prepared in wet form