## RESEARCH AND DEVELOPMENT FINAL PROJECT "HIGH CALCIUM FISH NOODLE"



# Arranged by: JOVALDO SORENSEN 1774130010047

# STUDY PROGRAM OF CULINARY ART OTTIMMO INTERNATIONAL SURABAYA 2019

## RESEARCH AND DEVELOPMENT FINAL PROJECT HIGH CALCIUM FISH NOODLE

Arranged by:

JOVALDO SORENSEN (1774130010047)

Surabaya,

Approoved by:

Advisor, Examiner I, Examiner II,

Aprilia Nurcahyaning Rahayu,

S.Pd.,M.Kes

NIP. 199204081803042

Knowing,

Director of OTTIMMO Head of Study Program Culinary

International Mastergourmet Arts, OTTIMMO International

Academy. Mastergourmet Academy

Zaldy Iskandar, B.SC. Irra Chrisyanti Dewi, S.Pd.,M.S.M

NIP: 197310251201001 NIP: 197812011702028

#### **ACKNOWLEDGMENT**

This work would not have been possible without guidance and assistance from various parties. To that end, the authors express their sincere thanks to:

- 1. Ms. Aprilia Nurcahyaning Rahayu, S.Pd.,M.kes as Advisor who has provide guidance and suggestions during and until the completion of this project.
- 2. Ms. Irra C Dewi, S.Pd.,M.S.M as Head of the Culinary Arts Studies Program for the information on the guideline of this entire project.
- 3. Mr. Zaldy Iskandar, B.Sc as Director of Akademi Kuliner dan Patiseri OTTIMMO International Surabaya.

As my teacher and mentor, they has taught me more than I could ever give the credit for them. They have showed me by their example of what a good chef and person I should become.

Finally, Praise and thanks to God Almighty for the successful completion of this report. The Author can complete the writing of the Research and Development Final Project Entitled "Dried Noddle Fish". This report is prepared as on of the requirements to complete the Diploma III of Culinary Arts. Finally, the Authors hope that this report can be useful for us all.

Surabaya,

JOVALDO SORENSEN

#### **EXECUTIVE SUMMARY**

As we know Indonesia is very well known for their wide ocean and fish supply, we also know that Indonesia is one of the largest fish exporters in the world. Fish have a high nutritional value because they provide high quality protein, rich in essential amino acids, a good source of complex vitamin B, and contain a wide variety of minerals including phosphorus, magnesium, iron, zinc, and even iodine. In the marine industries fish stands out as one of the most cultivated marine animals in the world. Furthermore, due to several technological advancement the quality of the meat and the removal of fish bones during the filleting process has become much more efficient.

There have already been some studies performed to improve the nutritional value of several food products for examples soup, snacks, cookies, and crackers by including fish in them. This concludes that there is a good way to increase fish consumption once people are looking to buy healthy fast food products which are easy to prepare but also has low-calories. Finally, dried noodles are a popular product due to their ease of transportation, ease of preparation, long shelf life, and their delicious taste. Which makes dried noodles one of the most profitable products, also a lot of people have already thought of noodles as a staple food.

Keyword: Food, Fish, and noodles.

#### **TABLE OF CONTENTS**

COVER	
RESEARCH AND DEVELOPMENT FINAL PROJECT	ii
ACKNOWLEDGMENT	iii
EXECUTIVE SUMMARY	iv
TABLE OF CONTENTS	v
LIST OF PICTURES	vi
LIST OF TABLES	vii
CHAPTER I INTRODUCTION	
BACKGROUND	1
OBJECTIVE	1
CHAPTER II INGREDIENTS AND UTENSILS	
INGREDIENTS	
UTENSILS	8
CHAPTER III PRODUCT PROCESSING SEQUENCE	
PRODUCTION METHODE	
PRODUCTION	13
HYGIENE AND SANITATION	14
FINAL RECIPE	15
SHELF LIFE	17
CHAPTER IV NEW PRODUCT OVERVIEW	
NUTRITION FACT	18
PRODUCT CHARACTERISTIC	
CHAPTER V PRODUCT PROCESSING SEQUENCE	
SWOT ANALYSIS	21
MARKETING PLAN	
TARGET MARKET OVERVIEW	22
MARKET POSITIONING	22
MARKETING CONCEPT	23
TECHNICAL ASPECT	
LOCATION	24
PRODUCTION CAPACITY	24
FINANCIAL ASPECT	
VARIABLE COST	25
OVERHEAD COST	26
FIXED COST	26
BREAKEVEN POINT	27
CHAPTER VI	
CONCLUSION	28
SUGGESTION	28
REFERENCE	29
APPENINIX	30

#### LIST OF PICTURES

PICTURE 1. MACKEREL FISH	2
PICTURE 2. SALT	
PICTURE 3. PEPPER	
PICTURE 4. TAPIOCA FLOUR	5
PICTURE 5. RICE FLOUR	6
PICTURE 6. COOKING OIL	. 7
PICTURE 7. EGG	
PICTURE 8. SPOON	
PICTURE 9. KNIFE	
PICTURE 10. DIGITAL SCALE	9
PICTURE 11. PLATE	9
PICTURE 12. BOWL	
PICTURE 13. CUTTING BOARD	10
PICTURE 14. FOOD PROCESSOR	11
PICTURE 15. PIPING BAG	
PICTURE 16. STOCK POT	
PICTURE 17. GAS STOVE	12
PICTURE 18. PROCESSING THE FISH	15
PICTURE 19. FISH BONE	15
PICTURE 20. MIX	
PICTURE 21. PASTE	
PICTURE 22. WATER AND OIL	16
PICTURE 23. PROCESS	
PICTURE 24. NOODLES	
PICTURE 25. FINAL PRODUCT	
PICTURE 26. NUTRITION ON PACKAGE	30
PICTURE 27. LOGO	30

#### LIST OF TABLES

TABLE 1. NUTRITION FACTS IN ONE RECIPE	18
TABLE 2. NUTRITION FACTS IN ONE SERVING	19
TABLE 3. VARIABLE COST	25
TABLE 4. OVERHEAD COST	26
TABLE 5. FIXED COST	26

### RESEARCH AND DEVELOPMENT FINAL PROJECT FISH NOODLE

(High Calcium Fish Noodle)

Arranged by:

Jovaldo Sorensen (1774130010047)

Surabaya, 19 Agustus 2019

Approved by:

Aprilia Nurcahyaning Rahayu, S.Pd, M.Kes. . 4

Dr.Ir. Fadjar Kurnia Hartati, M.P. ...

Chef Arya Putra Sundjaya....

Chef Albert Aldo Kurniawan......

Knowing,

Director of Akademi Kuliner dan

Patiseri Ottimmo International

Zaldy Iskandar B.SC.

NIP: 197310251201001

Head of Study Program of Akademi

Kuliner dan Patiseri Ottimmo

International

Irra Chrisyanti Dewi, S.Pd, M.S.M.

NIP: 1978120117020

#### ACKNOWLEDGMENT

This work would not have been possible without guidance and assistance from various parties. To that end, the authors express their sincere thanks to:

- 1. Ms. Aprilia Nurcahyaning Rahayu, S.Pd.,M.kes as Advisor who has provide guidance and suggestions during and until the completion of this project.
- 2. Ms. Irra C Dewi, S.Pd., M.S.M as Head of the Culinary Arts Studies Program for the information on the guideline of this entire project.
- 3. Mr. Zaldy Iskandar, B.Sc as Director of Akademi Kuliner dan Patiseri OTTIMMO International Surabaya.

As my teacher and mentor, they has taught me more than I could ever give the credit for them. They have showed me by their example of what a good chef and person I should become.

Finally, Praise and thanks to God Almighty for the successful completion of this report. The Author can complete the writing of the Research and Development Final Project Entitled "Dried Noddle Fish". This report is prepared as on of the requirements to complete the Diploma III of Culinary Arts. Finally, the Authors hope that this report can be useful for us all.

Surabaya,

DBAFF946905416

JOVALDO SORENSEN