

RESEARCH AND DEVELOPMENT FINAL PROJECT

THE BEANSTALK VEGIE-BALL

**(High Fibre, Vitamin, and Mineral Vegetarian Vegie-ball Made of Broccoli
Stalk and Black Eyed Bean)**



Arranged by:

Maria Kineta (1574130010049)

STUDY PROGRAM OF CULINARY ART

AKADEMI KULINER DAN PATISERI

OTTIMMO INTERNASIONAL

SURABAYA

2017

RESEARCH AND DEVELOPMENT FINAL PROJECT

THE BEANSTALK VEGIE-BALL

(High Fibre, Vitamin, and Mineral Vegetarian Vegie-ball Made of Broccoli Stalk and Black Eyed Bean)

Arranged by:

Maria Kineta (1574130010049)

Surabaya, August 18th 2017

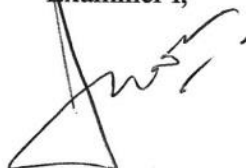
Approved by:

Supervisor,



Heni Adhianata,
STP., MSc.
NIP. 19900316 1402
016

Examiner I,



Irra Chrisyanti Dewi,
S.Pd., M.S.M
NIP. 19781201 1702 028

Examiner II,



Asri Puspita Wardhani,
STP., MSc.
NIP. 19891026 1402 017

Director of Akademi Kuliner dan
Patiseri Ottimmo Internasional,



Zaldy Iskandar, B.Sc.
NIP. 19731025 1201 001

Head of Study Program Culinary Art
Akademi Kuliner dan Patiseri
Ottimmo Internasional,



Irra Chrisyanti Dewi, S.Pd., M.S.M
NIP. 19781201 1702 028

PREFACE

As a part of the Diploma Curriculum and in order to gain practical knowledge in the field of Culinary Art, the writer is required to make a Research and Development as Final Project. In this project report, the writer included detail of ingredients, cooking methods, nutrition facts, marketing strategy, and also product calculation.

Working in this project report helps to enhance knowledge regarding the work in to the attitude of consumer towards new product, whether it could be accepted or not.

Finally, the writer would like to thank Chef Zaldy Iskandar, Ms. Heni Adhianata, and Mrs. Diana Indrawati for their help in supervising this product and making this report.

TABLE OF CONTENTS

COVER PAGE	i
SIGNATURE PAGE	ii
PREFACE	iii
TABLE OF CONTENTS	iv
LIST OF PICTURES	vii
LIST OF TABLES	ix
EXECUTIVE SUMMARY	x
CHAPTER I INTRODUCTION	1
1.1. Background	1
1.2. Objective	2
CHAPTER II PRODUCT DESCRIPTION	3
2.1 Product Description	3
2.2 Materials	3
2.2.1 Broccoli Stalk.....	3
2.2.2 Black Eyed Bean/ Cowpea.....	4
2.2.3 Jew’s Ear Mushroom.....	4
2.2.4 Tapioca Flour	5
2.2.5 Onion.....	5
2.2.6 Garlic.....	6
2.2.7 Salt	6
2.2.8 White Pepper.....	6
2.2.9 Paprika Powder	7
2.2.10 Cooking Oil.....	7
2.2.11 Drinking Water.....	8
2.3 Equipment and Tools.....	9
2.3.1 Gas Stove	9
2.3.2 Cooking Pot.....	9
2.3.3 Sautee Pan/ Frying Pan	9
2.3.4 Wooden Spatula	10
2.3.5 Spoon	10
2.3.6 Digital Kitchen Scale	10
2.3.7 Kitchen Knife	11
2.3.8 Plastic Container	11

2.3.9	Strainer	11
2.3.10	Freezer.....	12
2.3.11	Chiller.....	12
2.3.12	Food Processor	12
2.3.13	Vacuum Sealer and Plastic.....	13
2.3.14	Large Stainless Steel Bowl.....	13
2.3.15	Cutting Board	13
2.3.16	Strainer Ladle	14
2.3.17	Cooking Gloves.....	14
2.4	Production Methods	15
2.4.1	Kitchen Layout.....	15
2.4.2	Standard Operating Procedure	16
2.4.3	Procedure.....	17
2.4.4	Hygiene and Sanitation Procedure	18
2.5	Material's Nutrition Raw.....	18
2.5.1	Broccoli Stalk.....	18
2.5.2	Cowpea/ Black Eyed Bean.....	20
2.5.3	Jew's Ear Mushroom.....	21
2.5.4	Tapioca Flour	22
2.5.5	Onion.....	23
2.5.6	Garlic.....	24
2.5.7	Salt	25
2.5.8	White Pepper.....	26
2.5.9	Paprika Powder	27
2.5.10	Cooking Oil.....	28
2.5.11	Drinking Water.....	29
2.6	Nutrition Fact of Vegie-ball (Per Pack @12 vegie-ball).....	30
2.7	Hazard Analysis and Critical Control Point (HACCP).....	32
CHAPTER III MARKETING STRATEGY		34
3.1	Business Analysis.....	34
3.1.1	Introduction of Industry	34
3.1.2	Short Term Objective.....	34
3.1.3	Long Term Objective	34
3.1.4	Opportunity	35
3.2	Market Environment Analysis.....	35
3.2.1	Industrial Analysis	35

3.2.1.1	Threat of Barrier	35
3.2.1.2	Supplier Power	35
3.2.1.3	Buyers Power	36
3.2.1.4	Substitute Product.....	36
3.2.1.5	Competitive Rivalry	36
3.3	Marketing Strategy	36
3.3.1	Segmentation, Targeting, and Positioning	36
3.3.2	Marketing Mix	37
3.3.2.1	Product.....	37
3.3.2.2	Price.....	37
3.3.2.3	Place	37
3.3.2.4	Promotion	37
3.3.2.5	Employee.....	37
3.3.3	TOWS Matrix	38
3.4	Human Resource Management.....	38
3.4.1	Employee.....	38
3.4.2	Operational.....	38
3.4.3	Recruiting, Selecting, Interview.....	38
3.4.4	Training.....	39
3.4.5	Appraisal and Task Breakdown	39
3.4.6	Salary and Compensation.....	40
	CHAPTER IV PRODUCT CALCULATION	41
4.1	Cost of Production.....	41
4.1.1	Variable Cost.....	41
4.1.2	Overhead Cost.....	42
4.2	Fixed Cost.....	42
4.3	Break Event Point (BEP).....	43
	CHAPTER V CONCLUSION	44
5.1	Conclusion.....	44
5.2	Suggestion	44
	REFERENCES	45
	APPENDIX	49
7.1	Recipe Revision:.....	49
7.2	Front and Back Label	50
7.3	Original Recipe with Approval Stamp	50

LIST OF PICTURES

Picture 2.1 Label Example	3
Picture 2.2 Broccoli Stalk	3
Picture 2.3 Cowpea/Black eyed bean.....	4
Picture 2.4 Jew’s Ear.....	5
Picture 2.5 Tapioca Flour	5
Picture 2.6 Onion	5
Picture 2.7 Garlic	6
Picture 2.8 Salt	6
Picture 2.9 White Pepper.....	7
Picture 2.10 Paprika Powder.....	7
Picture 2.11 Cooking Oil	8
Picture 2.12 Drinking Water	8
Picture 2.13 Gas Stove	9
Picture 2.14 Cooking Pot	9
Picture 2.15 Sautee Pan/ Frying Pan.....	9
Picture 2.16 Wooden Spatula.....	10
Picture 2.17 Spoon	10
Picture 2.18 Digital Scale.....	10
Picture 2.19 Kitchen Knife.....	11
Picture 2.20 Plastic Container	11
Picture 2.21 Strainer.....	11
Picture 2.22 Freezer	12
Picture 2.23 Chiller	12
Picture 2.24 Food Processor.....	12
Picture 2.25 Vacuum Sealer.....	13
Picture 2.26 Large Stainless Steel Bowl	13
Picture 2.27 Cutting Board.....	14
Picture 2.28 Strainer Ladle.....	14
Picture 2.29 Cooking Gloves	14
Picture 2.30 Kitchen Layout	15
Picture 2.31 Standard Operation Procedure	16
Picture 2.32 Procedure	17
Picture 2.33 Broccoli Stalk Nutrition Raw	19

Picture 2.34 Cowpea Nutrition Raw	20
Picture 2.35 Jew’s Ear Nutrition Raw	21
Picture 2.36 Tapioca Flour Nutrition Raw	22
Picture 2.37 Onion Nutrition Raw	23
Picture 2.38 Garlic Nutrition Raw	24
Picture 2.39 Salt Nutrition Raw	25
Picture 2.40 White Pepper Nutrition Raw.....	26
Picture 2.41 Paprika Powder Nutrition Raw	27
Picture 2.42 Cooking Oil Nutrition Raw	28
Picture 2.43 Water Nutrition Raw.....	29
Picture 3.1 TOWS Matrix	38
Picture Appendix 1 Front Label	50
Picture Appendix 2 Back Label	50

LIST OF TABLES

Table 2.1 Nutrition Fact Per Pack	30
Table 3.1 Performance Appraisal.....	39
Table 4.1 Variable Cost.....	41
Table 4.2 Overhead Cost.....	42
Table 4.3 Fixed Cost	42

EXECUTIVE SUMMARY

Broccoli stalk is a waste in Indonesia, people won't use it in their cooking so it goes straight to the trash. Broccoli stalk is in fact higher in fibre and antioxidant than the florets part. The writer saw this opportunity to create a new product that use broccoli stalk as the main ingredients.

The writer create the vegie-ball product from broccoli stalk and black eyed bean/cowpea because those two main ingredients is very underrated by society. Broccoli stalk could be bought for only Rp 5,000,- that could be made to a valuable product that will lift the price quite significantly.

“The Beanstalk Vegie-ball” is a vegetarian vegie-ball that is high in fibre, vitamin, and mineral, that is made of broccoli stalk, black eyed bean/ cowpea, and jew's ear mushroom. It is an alternative and solution for vegans and health conscious society if they are craving for meatball.

The writer saw a marketing opportunity of this product in general society, especially those who are health conscious and vegetarian. With selling price only Rp 15,000,-, the writer believes that it is not too cheap to be underestimated by customer, but not too expensive to be avoided.