

**CULINARY INNOVATION AND NEW PRODUCT
DEVELOPMENT REPORT**

**UTILIZATION OF PUMPKIN SEEDS AS A MILK
SUBSTITUTE IN MAKING LACTOSE-FREE ICE CREAM**



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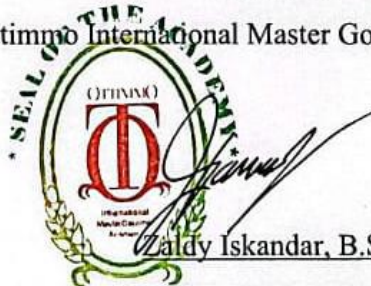
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PREFACE

Praise to God, for giving me strength and letting me through all the difficulties so I was able to complete this Culinary Innovation and New Product Development Report to fulfill the requirements for participating in an internship.

I also take this opportunity to express my gratitude to:

1. Chef Zaldy Iskandar, B. Sc as director of Ottimmo International Master Gourmet Academy.
2. Ms. Elma Sulistiya, S.T.P., M.Sc as my advisor who always guides and supports me throughout the entire process of writing this report.
3. Ms. Heni Adhianata, S.T.P., M.Sc as head of Culinary arts study program of Ottimmo International Master Gourmet Academy.
4. My family who always support and help me in personally and providing moral & material support for me.
5. My friends who have supported the progress of thus report from beginning to end.

That is all I can say, I apologize if there are errors or inconsistency in the use of words or sentences. Hopefully, the following report is helpful for the readers. Thank you.

Surabaya, August 28th 2025



Shannon Marilyn Kale

ABSTRACT

The innovation of using pumpkin seeds as a milk substitute in making lactose-free ice cream aims to provide a healthier alternative for individuals with lactose intolerance. The production process involves several steps, such as extracting the pumpkin seeds into milk, combining with the custard base, and freezing it without the use of an ice cream machine. Sensory evaluation by the panelists showed positive feedback particularly in taste and aroma, although a slightly grainy texture was noted due to the manual stirring, but it does not affect the overall score. The product has an estimated shelf life up to 6 months when it stored consistently at -18°C and away from strong odors. Nutritional analysis revealed that each serving of pumpkin seeds ice cream (50 grams), contains 150 calories, 4 grams of protein, 18 grams of carbohydrates, and 3 grams of dietary fibers. The selling price of pumpkin seeds milk ice cream is Rp40.000/pack. Overall, pumpkin seeds milk ice cream shows a promising potential as an alternative option for individuals with lactose intolerance.

Keywords: *Pumpkin seeds milk, lactose-free Ice cream, lactose intolerance*

TABLE OF CONTENTS

Plagiarism Statement.....	ii
Approval 1	iii
Approval 2	iv
Preface.....	v
Abstract.....	vi
Table of Contents	vii
List of Figures.....	ix
List of Tables	x
Chapter I Introduction	1
1.1 Background of the Study	1
1.2 Objectives of the Study	2
Chapter II Literature Review	3
2.1 Ingredients Review	3
2.1.1 Pumpkin Seeds	3
2.1.2 Pumpkin Seeds Milk	5
2.2 Product Review	6
2.3 Process Review	7
2.3.1 Simmering	7
2.3.2 Freezing	8
Chapter III Method	9
3.1 Time and Place.....	9
3.2 Ingredients and Utensils.....	9
3.2.1 Ingredients	9
3.2.2 Utensils.....	10
3.3 Processing Methods	10
3.4 Flow chart	12
Chapter IV Result And Discussion.....	14
4.1 Product Result.....	14
4.2 Nutrition Fact.....	15
4.2.1 Nutrition Table	15
4.2.2 Nutritional Calculation	16

4.2.3 Nutrition Label	17
4.3 Food Safety and Packaging.....	18
4.3.1 Processing and Storage Temperature	18
4.3.2 Shelf Life	19
4.3.3 Product Packaging	19
4.4 Financial Aspects	21
4.4.1 Product Cost	21
4.4.2 Selling Price	22
Chapter V Conclusion And Suggestion.....	23
5.1 Conclusion	23
5.2 Suggestion.....	23
Bibliography	25
Appendix	28

LIST OF FIGURES

Figure 2.1 Pumpkin Seeds	3
Figure 2.2 Pumpkin Seeds Milk	5
Figure 3.1 Flowchart Pumpkin Seeds Milk Ice Cream with Manual Stirring....	12
Figure 3.2 Flowchart Pumpkin Seeds Milk Ice Cream Using Ice Cream Machine.....	13
Figure 4.1 Pumpkin Seeds Milk Ice Cream	14
Figure 4.2 Nutritional Fact.....	17
Figure 4.3 Kraft Paper Cup	20
Figure 4.4 Packaging Label.....	20
Figure 4.5 Logo Design.....	21

LIST OF TABLES

Table 2.1 Nutritional Value of Roasted Pumpkin Seeds	4
Table 2.2 Nutritional Comparison per 100 g of Roasted Pumpkin and Sunflower Seed.....	5
Table 3.1 Ingredients for Pumpkin Seeds Milk	9
Table 3.2 Ingredients for Lactose-free Pumpkin Seeds Milk Ice Cream	9
Table 3.3 Utensils for Lactose-free Pumpkin Seeds Milk Ice Cream	10
Table 4.1 Nutritional Value of Roasted Pumpkin Seeds per 100 g.....	15
Table 4.2 Nutritional Value of Non-Dairy Cream per 100g	15
Table 4.3 Nutritional Calculation of Pumpkin Seeds Milk Ice Cream.....	16
Table 4.4 Cost of Ingredients	21
Table 4.5 Cost of Packaging.....	22
Table 4.6 Total Cost	22