

**RESEARCH AND DEVELOPMENT FINAL PROJECT  
HORSERADISH & TRIO SEEDS CRACKER**



**OTTIMMO**

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## **PREFACE**

Firstly I would like to extend the word thank you to God and the people who have supported me to complete this Research and Development report. Without your tremendous amount of guidance and support, such as in - class learning, practicing and interactions from my peers and lectures this project will be impossible for me to finish it myself.

Research and Development project report is originally stemmed not only as a requirement to graduate but also to create an idea for students in Ottimmo to push out their best creative and innovative ideas as far as they can then embody those idea with the principles of researching.

Therefore, this leads me to the idea of making crackers based on horseradish and seeds, due to a high demand of a healthy lifestyle that increases each year and the vision that I have on creating healthy snacking mindset.

**Surabaya, July 16th, 2019.**

**Adrilia Ginadevi**

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## EXECUTIVE SUMMARY

Horseradish and seeds crackers are a product that I have come out that is based horseradish, pumpkin seed, sunflower seed, chia seed and lastly is a few spices and herbs. Speaking of it's benefit The glucosinolates (natural components of in the horseradish), *Armoracia rusticana*, have the potential to increase human resistance to cancer and environmental toxins. They have powerful antioxidant properties and can also be used to relieve sinus and respiratory distress.

Meanwhile seeds such as pumpkin, chia and sunflower pack a powerful health punch as those seeds generally provide proteins, vitamins such as B and E, also they offer a good amount of essential fatty acids that are good for our body. Another thing that has caught the attention of using these seeds is they are very low in carbohydrates and most of the carbohydrates are fiber.

The processing for these crackers is simple, First is preparing all the raw materials needed and grate the horseradish. The next process mixing, all of the raw materials and spices then they will be combined in one bowl. The third process is putting them inside the oven to make them crisp and cooked evenly.

Horseradish and Seeds crackers will be packed in a combination of paper and plastic pack in a small size with a sticker labeled on the packaging itself. Each pack will approximately weight 70 grams of Kiefe – around 10-12 pieces of Crackers since the size and the weight of each Crackers may differ. Each pack will be sold at a price of IDR 42.000.

Keywords : Chia Seeds, Crackers, Horseradish, Pumpkin Seeds, Sunflower Seeds.

## PLAGIARISM STATEMENT

I certify that this assignment/report is my own work, based on my personal study and/or research and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communication. I also certify that this assignment/report has not previously been submitted for assessment in any other unit, except where specific permission has been granted from all unit coordinators involved, or at any other time in this unit, and that I have not copied in part or whole or otherwise plagiarized the work of other students and/or persons.

On this statement, I am ready to bear the risk/any sanctions imposed to me in accordance with applicable regulations, if in the future there is a breach of scientific ethics, or you have a claim against the authenticity of my work.

Thursday, 12 September 2019



Adriana Ginadevi