

**CULINARY INNOVATION AND NEW PRODUCT
DEVELOPMENT REPORT**

**UTILIZING TOFU PULP AND WHOLE GRAINS IN COOKIE
BITES FOR A SUSTAINABLE TREAT**



**ARRANGED BY
CAROLINE CALISTA CHANDRA
2374130010021**

**CULINARY ARTS STUDY PROGRAM
OTTIMMO INTERNATIONAL
MASTERGOURMET ACADEMY
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May 8th, 2025



Caroline Calista Chandra

APPROVAL 1

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT PROJECT

Name : Caroline Calista Chandra
Place, Date of Birth : Madiun, May 2nd 2025
NIM : 2374130010021
Study Program : D3 Culinary Arts
TITLE : UTILIZING TOFU PULP AND WHOLE
GRAINS IN COOKIE BITES FOR A
SUSTAINABLE TREAT

This paper has been approved by:

Head of Culinary Arts Study Program,
(May, 8th 2025)



Heni Adhianata, S.TP., M.Sc
NIP. 19900613 1402 016

Advisor,

(May 8th 2025)



Filias Kusuma, S.E., M.M.
NIP. 19871203 2403 023

Director of

Ottimo International Master Gourmet Academy



Zulay Iskandar, B.Sc
NIP. 19731025 1201 001

APPROVAL 2
UTILIZING TOFU PULP AND WHOLE GRAINS IN
COOKIE BITES FOR A SUSTAINABLE TREAT

Culinary Innovation and New Product Development report by:

Caroline Calista Chandra

2374130010021

This report is already presented and pass the exam on:
(July 18th, 2025)

This paper has been approved by:

Advisor : Filias Kusuma, S.E, M.M

1st Examiner : Heni Adhianata, S.Tp., M.Sc

2nd Examiner : Ryan Yeremia Iskandar, S.S.

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PREFACE

Praise be to God Almighty because on this occasion I was able to complete this report. Completion of this report intended to fulfill the requirements for participating in an internship.

I also take this opportunity to express my gratitude to:

1. Zaldy Iskandar, B.Sc as director of Ottimmo International Culinary Art and Patisserie Academy.
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4. My parents who always support and help me in personally and providing moral & material support for me.
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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, May 8th 2025



Caroline Calista Chandra

ABSTRACT

This study focuses on the development of a gluten-free cookie using tofu pulp (okara) and whole grains such as barley, oat, and quinoa. The goal was to create a nutritious snack that not only reduces food waste by utilizing tofu by-products but also caters to health-conscious consumers seeking high-fiber, preservative-free alternatives. The formulation involved a blend of tofu pulp flour and selected whole grain flours to achieve a balanced texture, flavor, and nutritional profile. The cookie dough was shaped and baked at controlled temperatures to ensure optimal crispness and flavor while preserving its nutritional integrity. The resulting cookie contains approximately 150 kcal per serving with a serving size of 30 grams and provides 4 grams of dietary fiber, which cover about 14% of the daily recommended intake and is sweetened with coconut sugar as a natural, lower-glycemic sweetener. Sensory evaluation showed positive feedback on taste, appearance, and crunchiness. The product is packaged in a double-layered system (inner pouch and paperboard box) to maintain freshness, with a shelf life of approximately 2–3 months under proper storage conditions. This innovation highlights the potential of upcycled ingredients in sustainable food production and presents a promising option for functional snacking in the gluten-free market. The selling price of the product is set at Rp20.000, based on calculated production and packaging costs with a reasonable profit margin.

Keywords: *Baking, Food waste, Gluten-free cookie bites, Tofu pulp, Whole grains*

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