

**CULINARY INNOVATION AND NEW PRODUCT
DEVELOPMENT REPORT**

**THE USAGE OF RED RICE FLOUR IN MAKING HIGH
FIBER RICE NOODLES**



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SURABAYA
2025**

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Surabaya, September 30th, 2025



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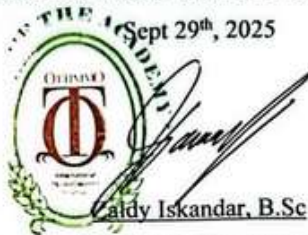
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PREFACE

Praise to God, for giving me strength and letting me through all the difficulties so I was able to finish this Culinary Innovation and New Product Development Report.

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. Heni Adhianata, S.TP., M.Sc as my CnD Advisor who always guides and supports me throughout the entire process of writing this report.
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4. My parents who always support and help me personally and provide moral & material support for me.
5. My friends who has supported the progress of this report from beginning to end.

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

Surabaya, September 30th, 2025



Adryel Ferdinand Cahyadi

ABSTRACT

Red rice (*Oryza sativa* L.) is a whole-grain rice variety that retains its bran and aleurone layers, which are rich in dietary fiber, essential minerals, and bioactive compounds. This study aimed to develop rice noodles (kwetiau) using red rice flour as a partial substitution for conventional rice flour and to evaluate its nutritional composition, particularly dietary fiber content, as well as potential functional benefits. A randomized formulation approach was applied to compare physicochemical properties, nutritional profiles, and sensory characteristics between noodles made from white rice flour and those incorporating red rice flour. Nutritional analysis revealed that red rice noodles contained a significantly higher amount of dietary fiber compared to the control sample, supporting the potential role of red rice flour in improving digestive health and reducing the postprandial glycemic response. In addition, red rice flour contributed higher levels of minerals such as iron, magnesium, and phosphorus, making the product a potential source of micronutrients. Sensory evaluation showed that red rice noodles were generally accepted by panelists, although differences in color and texture were noted. These findings suggest that red rice flour can be effectively utilized in the development of functional rice noodles with enhanced dietary fiber and micronutrient content, providing a promising alternative for health-conscious consumers, including those seeking gluten-free products.

Keywords: *red rice, rice noodles, dietary fiber, functional food, gluten-free*

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