

**CULINARY INNOVATION AND NEW PRODUCT
DEVELOPMENT REPORT**

**UTILIZATION OF RED KIDNEY BEAN AS SOY-FREE
ALTERNATIVES IN NATTO**



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Surabaya, October 3rd 2024



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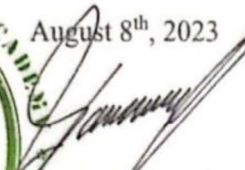
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PREFACE

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:

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3. Heni Adhianata, S.TP., M.Sc as head of Culinary art study program.
4. My parents who always support and help me in personally and providing moral & material support for me.
5. My friend who has supported the progress of this report from beginning to end.

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

Surabaya, October 3rd 2024



Grace Evania Sandjojo

ABSTRACT

This study explores the development of red kidney bean natto as a soy-free alternative to traditional natto, along with its integration into furikake seasoning. Red kidney beans (*Phaseolus vulgaris* L.), rich in protein, fiber, and essential minerals, offer a nutritious base for natto production, catering to individuals with soy allergies or dietary restrictions. The fermentation of red kidney beans using *Bacillus subtilis* produces a product with similar probiotic and nutritional benefits as traditional natto, while offering a unique flavor and texture. Additionally, the use of red kidney beans as a furikake base enhances the nutritional profile of this popular Japanese seasoning. By incorporating local ingredients, such as red kidney beans, this research not only supports sustainability and reduces dependence on imported soybeans but also promotes diversity in functional foods. The findings suggest that red kidney bean natto and furikake provide viable, health-conscious alternatives that meet modern dietary needs, while maintaining the traditional essence of Japanese cuisine. Further research into fermentation techniques, consumer acceptance, and packaging innovation could optimize the market potential of these products.

Keyword: *Red Kidney Bean, Natto, Furikake, Bacillus subtilis*

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