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PROCEEDINGS OF JOHOR INTERNATIONAL INNOVATION INVENTION COMPETITION AND SYMPOSIUM 2024 (JIIICaS 2024)



*“Flourish and Nurturing Sustainable
Innovation for a Prosperous Nation”*

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Preface

In the name of Allah, the Almighty who gives us the enlightenment, the truth, the knowledge and with regards to Prophet Muhammad (peace be upon him) for guiding us to the straight path. We thank to Allah for giving us guidance and strength to write this e-book.

This e-book compiles the extended abstracts that submitted to Johor International Innovation Invention Competition and Symposium 2024 (JIIICaS2024), where JIIICaS2024 is a virtual platform for all creative minds to share and present their invention and innovation. Each abstract gives a brief background on the innovation or project.

We hope that this e-book will help the readers to get to know the innovation done by the students and get some ideas to develop future innovation products.

Foreword Rector



Assalamualaikum warahmatullahi Wabarakatuh,
Salam Sejahtera, Salam Malaysia MADANI and
Salam UiTM Dihatiku.

In the name of Allah, the Most Gracious, the Most
Merciful.

It is a great honor to welcome you to the Johor
International Innovation, Invention, Competition, and
Symposium 2024 (JIIICaS 2024). This event

connects various disciplines, focusing on education and engaging educators,
students, researchers, and innovators from all walks of life.

Innovation is not just about ideas; it demands perseverance, creativity, and
determination to turn those ideas into reality. The remarkable projects
showcased today highlight the dedication and spirit of all participants.
Initiatives like this not only explore new technologies but also cultivate skills
and leadership among our youth. At Universiti Teknologi MARA (UiTM) Johor
Branch, we are fully committed to fostering a dynamic culture of innovation,
promoting the commercialization of new products, and encouraging
meaningful collaborations with industry and society.

As we celebrate this event, I would like to extend my heartfelt gratitude to all
sponsors, judges, the College of Computing, Informatics and Mathematics,
UiTM Pasir Gudang Campus as the event organizer, as well as to the
researchers and participants for their hard work in making this event a
success. Let us continue striving for innovation and excellence. May the
ideas presented today inspire us and lay the groundwork for future
achievements.

Thank you.

Associate Professor Dr. Saunah Zainon
Rector
Universiti Teknologi MARA (UiTM)
Johor Branch

(A-SS030) CALLO.BOX: REVOLUTIONIZING HEALTHY EATING HABITS WITH REALTIME CALORIE TRACKING AND NUTRITIONAL GUIDANCE

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ABSTRACT

In a world where obesity rates are soaring, the need for innovative solutions to promote healthy eating habits has never been greater. Callo.Box emerges as a beacon of hope, offering real-time calorie tracking and personalized nutritional guidance to individuals striving for better health. Developed to address the pressing need for mindful eating practices, Callo.Box provides users with instant feedback on their meal's calorie content, empowering them to make informed dietary choices. Through its advanced technology and user-friendly design, Callo.Box not only enhances nutritional awareness but also facilitates weight management and fosters a culture of mindful eating. This paper explores the development, functionality, and potential impact of Callo.Box, shedding light on its role in promoting healthier lifestyles and empowering individuals to take control of their dietary habits.

Keywords: healthy eating, calorie tracking, nutritional guidance, weight management, real-time feedback, innovative technology

1.0 INTRODUCTION

In today's fast-paced world, maintaining a healthy lifestyle amidst the chaos of daily life can be challenging. With the rise of obesity and related health issues, the importance of adopting healthy eating habits has become increasingly apparent. Recognizing this need, Callo.Box emerges as a groundbreaking solution, revolutionizing the way individuals approach food consumption. By providing real-time feedback on calorie intake and nutritional content, Callo.Box empowers users to make informed choices about their diet, promoting a culture of mindful eating and improved overall health. This introduction delves into the significance of Callo.Box in addressing the pressing need for healthier eating habits, highlighting its potential to transform the way we view and interact with food.

2.0 OBJECTIVE

The creation of Callo.Box products aims to respond to the growing concern over unhealthy dietary habits and rising obesity rates. The development of Callo.Box represents a significant step towards promoting healthier lifestyles and empowering individuals to make informed dietary choices. Other than that, the objective of this

product is also to encourage consumers to adopt healthy eating practices by providing real-time calorie information for meals, to improve nutritional knowledge by offering information on macronutrients and facilitating weight management through calorie intake monitoring, and to promote mindful eating behaviors by encouraging users to focus on food choices and portion sizes. Lastly, the purpose of this product is to strengthen personalized nutrition guidance to ensure tailored advice and support for improved diet and overall health.

3.0 METHODOLOGY

Callo.Box incorporates a multi-faceted approach to revolutionize the way individuals track their dietary intake and make informed nutritional choices. The methodology encompasses the following key features as battery Life and Durability: Designed with a long-lasting battery and steel-made body, Callo.Box ensures reliability and resilience for daily use. Advanced Technology is equipped with sensors and a built-in camera, Callo.Box employs image recognition technology to detect and identify food items accurately. Functionality offers extended battery life, calorie calculation, and heat resistance, Callo.Box provides users with a convenient and reliable tool for tracking their dietary intake and promoting healthier eating habits.

Example of figure is given below.

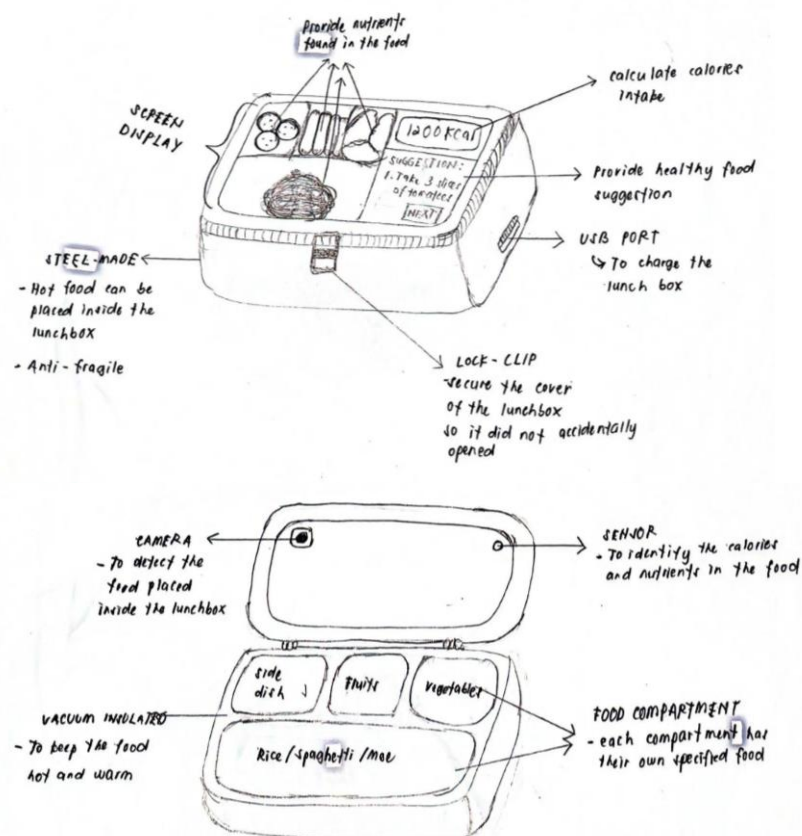


Figure 1: Callo.Box healthy food

4.0 RESULTS

The discussion section goes into detail about how Callo.Box might change people's eating habits and health, showing how important it is for encouraging healthier lifestyles and giving people the information they need to make smart food decisions. This part talks about a few important points:

Callo.Box could cause big changes in users' behaviour by making them more aware of how many calories they're eating and what nutrients are in food. Callo.Box encourages people to rethink their food decisions and start eating healthier by giving them feedback in real time. This leads to better overall health outcomes. Callo.Box does more than just track calories; it's also a great way to learn about macronutrients, serving sizes, and dietary needs. By helping people learn more about nutrition, Callo.Box gives them the power to make better food choices and take action to reach their health goals.

Using Callo.Box to help you adopt mindful eating habits can have long-term health benefits, such as helping you lose weight, lowering your risk of chronic diseases, and making you feel better overall. People who use Callo.Box are given the tools they need to keep up good eating habits for a long time by encouraging moderation and portion control. Easy Access and Low Cost: One of the best things about Callo.Box is that it is easy to use and doesn't cost a lot of money. In contrast to traditional ways of keeping track of calories, which may require expensive tools or professional help, Callo.Box provides a cheap option that can be used by anyone, no matter their financial situation.

5.0 CONCLUSION

In conclusion, Callo.Box is a bright spot in the battle against bad eating habits and rising obesity rates. Callo.Box gives people the tools they need to take charge of their eating habits and make smart decisions about their health by tracking calories in real time and giving them personalized nutrition advice. Callo.Box's new features and easy-to-use design could change the way we eat and encourage healthier lives for future generations.

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