E-PROCEEDINGS

INTERNATIONAL TINKER INNOVATION & ENTREPRENEURSHIP CHALLENGE (i-TIEC 2025)

"Fostering a Culture of Innovation and Entrepreneurial Excellence"

23 January 2025
PTDI, UiTM Cawangan Johor
Kampus Pasir Gudang

ORGANIZED BY:

Electrical Engineering Studies, College of Engineering
Universiti Teknologi MARA (UiTM) Cawangan Johor
Kampus Pasir Gudang
https://tiec-uitmpg.wixsite.com/tiec

e ISBN 978-967-0033-34-1

9 789670 033341

E-PROCEEDINGS
of International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025)

"Fostering a Culture of Innovation and Entrepreneurial Excellence"

23rd JANUARY 2025
PTDI, UiTM Cawangan Johor, Kampus Pasir Gudang

Organized by

Electrical Engineering Studies, College of Engineering,

Universiti Teknologi MARA (UiTM) Cawangan Johor, Kampus Pasir Gudang.

https://tiec-uitmpg.wixsite.com/tiec

Editors

Aznilinda Zainuddin

Maisarah Noorezam

e ISBN: 978-967-0033-34-1

Published in Malaysia by
Universiti Teknologi MARA (UiTM) Cawangan Johor
Kampus Pasir Gudang, 81750 Masai

A-ST007 - A-ST159

A-ST033: SWEETATO CREAMER

Mohamad Azli Razali, Norrina Din, Noorliza Zainol, and Khairul Hidayat Rezo
Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Pulau Pinang Branch, Permatang Pauh Campus, Pulau Pinang, Malaysia

Corresponding author: Norinna Din, norrina.din@uitm.edu.my

ABSTRACT

SweeTato Creamer is an innovative, plant-based powdered creamer crafted from nutrient-rich sweet potatoes and coconut milk powder, offering a naturally sweet and creamy alternative for beverages. Sweetened with stevia, it delivers a delicious flavor without added sugars, making it ideal for health-conscious consumers. This non-dairy, vegan-friendly product is rich in fiber, vitamins, and antioxidants, particularly vitamin A, supporting immune health and vision. Designed to address the growing demand for functional, clean-label foods, SweeTato Creamer redefines traditional creamers by leveraging the nutritional potential of sweet potatoes, an underutilized superfood. It promotes sustainability by supporting local agriculture and reducing reliance on processed ingredients. SweeTato Creamer caters to global trends for plant-based, low-sugar, and lactose-free alternatives, with significant potential for commercialization in the retail and health sectors. Its unique nutrient profile and convenience as a shelf-stable product make it an impactful addition to the food industry, fostering innovation, health-conscious living, and socio-economic growth.

Keywords: Sweet potatoes, Plant-based, Non-dairy, Functional foods, Health-conscious

1. Product Description

SweeTato Creamer is a wholesome, plant-based powdered creamer made from nutrient-rich sweet potatoes, offering a naturally sweet and creamy enhancement to your favorite beverages. Sweetened with stevia, it delivers a delicious flavor without added sugars, making it a perfect choice for health-conscious individuals. Crafted with 100% natural ingredients, SweeTato Creamer combines the earthy goodness of sweet potatoes with the creamy richness of coconut milk powder. This non-dairy, vegan-friendly creamer is packed with essential nutrients, including fiber, vitamins, and antioxidants, providing a nourishing boost in every spoonful. With its clean, simple ingredients and naturally delightful flavor, SweeTato Creamer is perfect for coffee, tea, or smoothies. Its convenient powdered form ensures easy mixing and a long shelf life, making it ideal for home, office, or travel. Upgrade your daily routine with SweeTato Creamer-the guilt-free way to enjoy a smooth and satisfying cup every time. Sip smart, live vibrantly!

2. Production and Packaging Process

Figure 1 illustrates the entire process of making SweeTato Creamer, beginning with the preparation of the sweet potatoes, followed by dehydration, grinding, and mixing. Afterward, the ingredients are blended to create the final powder, which is then carefully packed into sachets. **Figure 2,** on the other hand, shows the finished SweeTato Creamer Sachet**,** offering a convenient, easy-to-use packaging solution that ensures freshness and portion control. This process ensures that the creamer maintains its quality from production to consumer use.

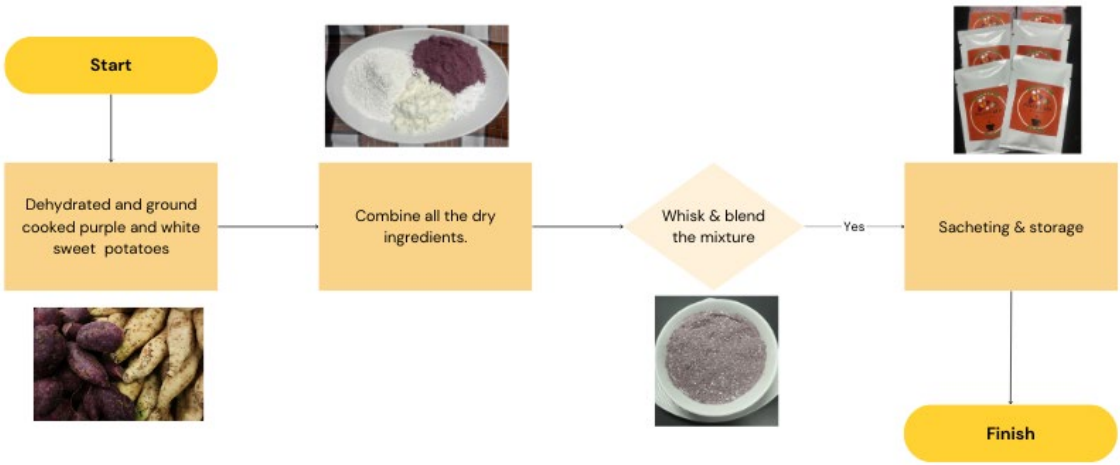

Figure 1. SweeTato Creamer Production Process.

Figure 2. SweeTato Creamer Sachet.

3. Novelty and uniqueness

SweeTato Creamer offers a unique twist on traditional creamers by leveraging the nutritional power of sweet potatoes, a highly versatile and underutilized ingredient. Unlike conventional creamers that often rely on dairy or artificial additives, SweeTato Creamer is entirely plant-based, non-dairy, and free from refined sugars, making it an ideal choice for

individuals seeking healthier alternatives in their daily beverages. The use of Stevia as a natural sweetener ensures that it caters to health-conscious consumers, offering a guilt-free way to enjoy creamy, flavorful drinks. What truly sets SweeTato Creamer apart is its rich nutrient profile. Sweet potatoes are known for their high fiber content, antioxidants, and vitamins, particularly Vitamin A and C, which contribute to overall health. By combining sweet potato powder with coconut milk powder, thecreamer not only delivers a smooth, creamy texture but also provides essential nutrients like potassium and calcium, enhancing its functional appeal. This product represents a novel approach to creating a creamy, plant-based, and nutritious alternative that aligns with growing trends toward clean-label, non-dairy, and low-sugar food options. In essence, SweeTato Creamer meets the increasing demand for functional, plant-based foods while offering a sustainable, health-promoting alternative to traditional creamers.

4. Benefit to mankind

SweeTato Creamer offers significant health benefits by providing a nutrient-rich, plant-based alternative to traditional creamers. Made from sweet potatoes, this product is naturally high in fiber, vitamins, and antioxidants, particularly vitamin A, which supports immune health and vision (Healthline, 2024). It also contains minimal sugars, sweetened with stevia, making it suitable for those managing blood sugar levels or seeking healthier food options. As a non-dairy, vegan-friendly product, SweeTato Creamer caters to individuals with lactose intolerance, dairy allergies, or those following plant-based diets. Its natural ingredients promote overall well-being, helping reduce reliance on processed foods that are often high in unhealthy fats and sugars. By offering a wholesome alternative to traditional creamers, SweeTato Creamer supports sustainable, health-conscious living and contributes to the global shift towards healthier eating habits.

5. Innovation and Entrepreneurial Impact

SweeTato Creamer promotes innovation by introducing a unique, plant-based, and nutrient-dense alternative to traditional coffee creamers, tapping into the growing demand for healthier, non-dairy options. By utilizing sweet potatoes, an underutilized superfood rich in vitamins, fiber, and antioxidants, this product redefines the way consumers think about everyday food ingredients, aligning with current trends toward functional, clean-label foods. From an entrepreneurial perspective, the project supports sustainable agricultural practices by sourcing locally grown sweet potatoes, contributing to economic development within the community. The commercialization of this innovative product creates new business opportunities, encouraging local producers, small-scale manufacturers, and entrepreneurs to explore the plant-based food sector. Additionally, it helps foster a culture of innovation within the food industry, demonstrating how conventional ingredients can be reimagined to meet consumer needs for health-conscious, environmentally friendly solutions.

6. Potential commercialization

SweeTato Creamer has strong potential for commercialization due to the increasing consumer demand for healthy, plant-based, and functional food products. The rise in dietary preferences for vegan, lactose-free, and low-sugar alternatives makes this product highly

marketable in both local and international markets. With a growing trend toward clean-label and non-dairy options, SweeTato Creamer aligns perfectly with these consumer shifts. The versatility of the product also allows for expansion into various sectors, including retail, food service, and the health and wellness industry. As a shelf-stable, powdered product, it can be easily distributed, reducing logistics costs and making it suitable for both online and offline sales. Additionally, its unique health benefits, such as high fiber and antioxidant content, position it as a premium offering in the plant-based food market, further enhancing its commercial appeal.

7. Acknowledgment

The authors would like to express their sincere gratitude to the Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Pulau Pinang Branch, Permatang Pauh Campus, Pulau Pinang, Malaysia, for the support and resources in making this project possible.

8. Authors' Biography

Mohamad Azli Razali graduated from Universiti Kebangsaan Malaysia with a Master in Food Science. Currently, he is pursuing a Doctorate in Business Administration at UiTM Merbok and is in his 5th semester. He holds an honors degree in Food Service Management and a Diploma in Chef Training from Universiti Teknologi MARA. He has been part of the Culinary Department, Faculty of Tourism and Hotel Management, UiTM, for 17 years. His expertise includes basic cookery, commercial cookery, pastry and baking, and food styling. His research interests focus on food acceptance, sensory evaluation, food development, and innovation.

Dr. Norrina Din, a distinguished Senior Lecturer in Hospitality and Tourism with a decade of experience, is a prolific scholar. Her research on consumer behavior, food allergy and safety, gastronomy, and education has been featured in magazines, newspapers, articles, and prestigious academic journals, reaching diverse audiences. She has fostered cross-cultural research through MoUs with leading universities in China, Thailand, and Japan. These collaborations bridge theory and practice, enhancing industry standards. Dr. Din's career is defined by excellence, innovation, and significant contributions to the field of global hospitality and tourism.

Senior Lecturer Noorliza Zainol, an expert in Hospitality and Tourism, focuses on gastronomy, education, consumer behavior, and food hygiene. Her commitment to knowledge dissemination is reflected in her extensive publications across journals, essays, and newspapers, reaching diverse audiences. Beyond academia, she collaborates with industry stakeholders to connect theoretical insights with practical applications. These partnerships provide students and professionals with deeper industry understanding and innovative solutions. Her impactful career demonstrates a dedication to advancing academic excellence and practical advancements in the hospitality and tourism sectors.

Khairul Hidayat Rezo, a senior lecturer, holds a Master in Food Science from Universiti Kebangsaan Malaysia, an honors degree in Food Service Management, and a Diploma in Chef Training from Universiti Teknologi MARA. Currently, he is pursuing a Doctorate in Business Administration at UiTM Merbok and is in his 5th semester. With over 18 years at the Culinary Department, Faculty of Tourism and Hotel Management, UiTM, he brings extensive expertise. Formerly a chef in the hotel industry, his teaching focuses on Malay cuisine, basic cookery, and commercial cookery. His research interests include food acceptance, sensory evaluation, food development, and culinary innovation.