



NIRBAA TECH SDN.BHD

Faculty: Faculty of Applied Sciences

Program: Bachelor of Science (Hons.) Biology

Program Code: AS201

Course: Technology Entrepreneurship

Course Code: ENT600

Semester: Semester 3

Group Name: AS2013A1

Group Members:

1. NOOR RAFIDAHWALYA BINTI MOHD ASRIN (2023510167)
2. AZMAN BIN ZAFRI (2023305981)
3. NOR INSYIRAH BINTI NORAZAM (2023516405)
4. NOOR NADA HAZIRAH BINTI ABDUL RAHMAN (2023376647)
5. NURUL BATRISYIA BINTI MOHD NOOR FAUZEE (2023141147)
6. NUR AININ SOFIYA BINTI ISMAIL (2023365557)

Submitted to

Miss Noor Hasvenda Binti Abd Rahim

Submission Date

21 Jun 2024

TABLE OF CONTENTS

CONTENTS	PAGES
1.0 EXECUTIVE SUMMARY	3
2.0 INTRODUCTION	4
2.1 Problem Statement/ Issues	5
2.2 Methodology	5-6
2.3 Limitations.....	7-8
3.0 NEW PRODUCT DEVELOPMENT	8
3.1 Definition.....	8-9
3.2 Classification of NPD	9-12
3.3 New Product Development Process.....	12
3.3.1 Research & Development	12-15
3.3.2 Product Design/Features.....	15-16
3.3.3 Concept Testing.....	16-19
3.3.4 Build Model/ Prototype (2D or 3D).....	20-22
3.3.5 Test Marketing	23-26
3.3.6 Customer Trend Canvas.....	27-29
4.0 CONCLUSION	29
5.0 REFERENCES	29

1.0 EXECUTIVE SUMMARY

Energy has once again become a new trend among people nowadays. Hikers, athletes, workaholics, and even students are now frequently consuming energy drinks to stay alert and maintain their active positions. These people might not know what they are drinking, so energy drink is often loaded with high levels of caffeine, a lot of synthetic sugars, various additives and legal stimulates like guarana, taurine, and L-carnitine. The major component of energy is caffeine, it contains 80-150 mg per 8 ounces which is same to 5 ounces of coffee or two 12-ounce cans of caffeinated soda. These stimulants can boost alertness, attention and energy, while also raising blood pressure, heart rate and breathing rate. Although they might sound beneficial, in turns they can be harmful and give effect on the nervous system. Energy drinks sold in the market are not easy to carry since they are all in cans or bottles. This makes it hard for hikers, athletes, and travellers to bring them along as they take up space.

In response to this challenge, NIRBAA TECH has introduced exceptional alternatives and innovations for energy drinks. Our company has decided to transform energy drinks into capsule form. These capsules are smaller, lighter, and occupy minimal space. As I mentioned earlier, contemporary drinks are often plagued by controversial rumours regarding their impact on human health. Therefore, we have chosen to use alternative ingredients in our energy drinks, such as gula anau. This natural sweetener, derived from anau trees, is rich in minerals and antioxidants, offering a healthier alternative to the high levels of synthetic sugar found in typical energy beverages. This is the unique charm and advantage of using natural sugar in our products. Consumers can enjoy our drinks without worrying about side effects or health concerns. Our innovative capsule form provides an excellent alternative, significantly reducing the burden for hikers, athletes, and travellers. The capsules are incredibly easy to carry and only require water to be ready for consumption, making them perfect for an active lifestyle.

To gain a deeper understanding of our customers and improve our product, we recently carried out an extensive survey to collect feedback on their experiences with our products and services. The survey was designed to pinpoint our strengths, identify areas for improvement and enhance overall customer satisfaction. Our survey included on have they ever heard about tablet energy drink and only 17.5% of them have heard about it while others are don't and this confirms that our products to usher in a new era and set the trend for energy drinks in the market.

2.0 INTRODUCTION

Introducing our innovative energy drink tablets, carefully designed to meet the needs of modern, health-conscious individuals who lead active lifestyles. Unlike traditional energy drinks, our advanced tablets are compact, lightweight, and exceptionally portable. This makes them an excellent choice for a wide range of users, from enthusiastic hikers exploring challenging terrain to committed athletes pushing their physical boundaries, frequent travellers managing hectic schedules, and busy professionals handling demanding workloads. Our tablets signify a breakthrough in energy supplementation, offering a practical solution that seamlessly integrates into daily routines without the bulk and inconvenience of conventional liquid energy drinks. Engineered to provide sustained energy and enhance mental focus, they serve as a convenient alternative for those prioritizing both performance and well-being.

Our innovative energy drink tablets are meticulously designed to meet the demands of today's active and health-conscious consumers. Unlike traditional energy drinks, our tablets are compact, lightweight, and easily portable, making them an ideal choice for a variety of lifestyles. Whether you're an avid hiker tackling rugged trails, a dedicated athlete pushing your limits, a frequent traveller managing a busy schedule, or a professional handling demanding workloads, our tablets are crafted to be your perfect companion. Central to our product is gula ANAU, a natural sweetener derived from ANAU trees. Rich in essential minerals and antioxidants, gula ANAU provides a healthier alternative to the synthetic sugars commonly found in traditional energy drinks. By incorporating this natural ingredient, we ensure that our tablets not only deliver the energy boost you need but also contribute to your overall well-being.

Our tablets are engineered for maximum convenience and simplicity. Simply dissolve one tablet in water, and you're prepared to take on any challenge – whether it's conquering a challenging hike, gearing up for an intense workout, or powering through a busy workday. Designed to sustain energy levels and enhance mental focus without the drawbacks associated with liquid energy drinks, our tablets represent the forefront of energy supplementation. Embrace the future of energy drinks with our portable, nutritious, and efficient tablets. Join us in transforming how you maintain energy and focus throughout your day.

2.1 Problem Statements/ Issues

Energy drinks are frequently consumed by those with active lifestyles, but it can be burdensome for them to constantly purchase canned and bottled versions. These traditional containers are inconvenient due to their larger size and difficulty to carry around. Additionally, individuals who prioritize an active and healthy lifestyle may be concerned about the typical ingredients in conventional energy drinks, as they are not always healthy and could negatively impact the health they strive to maintain. It is well-known that energy drinks are often high in caffeine, which can lead to serious heart and blood vessel problems, including heart rhythm disturbances, elevated heart rate, and increased blood pressure. Additionally, many energy drinks contain guarana, a plant that naturally contains caffeine, further increasing the overall caffeine content in a single beverage. Another ingredient that should be minimized is aspartame, a commonly used non-saccharide sweetener that is 200 times sweeter than sucrose. While reviews suggest that low or no-sugar products containing aspartame may help reduce excessive sucrose intake, it may counterintuitively increase the risk of cardiovascular disease and type 2 diabetes. Additionally, its phenylalanine content is dangerous for individuals with phenylketonuria (PKU). Though unproven, there is ongoing concern that artificial sweeteners like aspartame may be linked to cancers and neurotoxic symptoms. Therefore, our company has developed an alternative solution by creating energy drinks in tablet form and using gula ANAU to replace synthetic sugar. This approach addresses the health concerns associated with traditional energy drinks, providing a safer and more convenient option for consumers.