



اُنِيْوَرْسِيْٓتِيْ تِيْكَنُوْلُوْجِيْ مَآرَا
UNIVERSITI
TEKNOLOGI
MARA



JellyPlop

Faculty : Faculty Of Applied Sciences

Program : Bachelor in Food Science and Technology (Hons.)

Program Code : AS266

Course : Technology Entrepreneurship (ENT600)

Group Members :

- 1. HARITH ZUHAIRI BIN KAMARUL BADRI
(2024144731)**
- 2. MUHAMMAD AFFIQ AIMAN BIN ZAIRI
(2024779859)**
- 3. NIK NUR AISHAH BINTI MOHD SHAFARUDDIN
(2024568729)**
- 4. FATIN NURSYAHIDAH BINTI ZOMORNI
(2024910897)**
- 5. NURAMALIA BINTI IBRAHIM
(2024907981)**
- 6. NUR HANI ADRIENA BINTI AHMAD FAISAL
(2024974705)**

Submitted to: Noor Hasvenda Abd Rahim

Submission Date: 4 JULY 2025

Table of Contents

1.0 EXECUTIVE SUMMARY	3
2.0 INTRODUCTION	4
2.1 Problem statement.....	5
3.0 NEW PRODUCT DEVELOPMENT	7
3.1 Introduction.....	7
3.2 Classification of NPD (Incremental or radical product /services)	7
3.3 Customer Trend Canvas (CTC)	9
3.3.1 Idea generation.....	10
3.3.2 Idea Screening.....	11
3.3.3 Market Survey.....	12
3.4 New Product Development Process.....	14
3.4.1 Research & Development	14
3.4.2 Product Design/Features	16
3.4.2.1 Product dimensions.....	16
3.4.2.2 Physical design, artistic aesthetics	17
3.4.2.3 Architecture & market needs	18
3.4.3 Concept Testing	20
3.4.4 Build Prototype	25
3.4.5 Test Marketing	28
4.0 CONCLUSION.....	34
5.0 REFERENCES	35

1.0 EXECUTIVE SUMMARY

This New Product Development (NPD) report discusses Jelly Plop, a fun, nutritious and environmentally friendly konjac-based jelly snack in response to growing evidence of demand for healthier snack options among modern consumers. Jelly Plop's formulation uses natural tropical fruit extracts that are rarely sold in the market. The tropical fruits include mangosteen, papaya and rambutan with no added sugar, artificial colours and preservatives. This is to maintain the natural properties of the fruit extracts in Jelly Plop. The fruit extracts in Jelly Plop also have beneficial dietary fibre, vitamins (A, B, C) and collagen peptides and antioxidants, all of which promote lifestyle benefits for digestion and skin health.

Jelly Plop was developed following an NPD framework starting from idea generation, concept screening, market validation, prototype development and test marketing. Jelly Plop is largely an incremental innovation as it enhances the existing konjac jelly snack offering with a more beneficial ingredient list, improved nutritional benefits and environmentally sound sourcing with a surplus of local fruits.

Consumer insights generated during the study using a survey among university-aged students showed a genuine interest in the health-oriented benefits of Jelly Plop, individual bear-shaped bites and tropical flavors in particular, mangosteen and rambutan. While there are many different packaging options, there is a clear acknowledgement of the appeal for bright and colorful packaging. Market testing also supports good price acceptability with a range of RM5–RM7 per pack and appears to have relatively high purchase intent especially if the manufacturer promotes with health-based communications such as “made from real fruit” and “no added sugar”.

Jelly Plop is a scalable and affordable way to capitalize on today's food trends such as clean labeling, low-calorie snacks and reduced food waste. It is likely to have a successful market presence among health-conscious youth and families for a healthy, functional snack option.

2.0 INTRODUCTION

In this era of the year, the food industry has developed food products towards healthier food products since the current generation of children, young and old people are exposed to unhealthy foods such as fast food or snack food because they are busy working so they do not have time to cook nutritious food (S et al., 2021). In addition, they are less exposed to nutritious foods or additional supplements. For example, snack is a jelly, sweet, cookies, chips and others are considered a less nutritious food product. Food products like this have caused a high demand for quick snacks that are nutritious and low in calories.

Snacks like jelly are popular snacks all over the world and are often considered as snacks that lack nutrition. Most jelly products sold in the market contain high levels of sugar and artificial coloring (Jayasinghe, Pahalawattaarachchi, Ranaweera, & Author, 2016). This may attract children and the sugar level in jelly causes the sugar level in the child's body to become less stable. This negative perception is evidenced by the lack of low-calorie, nutritious, low-sugar with fruit-based jelly products with health benefits.

To fulfil the market, one initiative that is useful in this opportunity is an innovative food product known as Jelly Plop, a smart and easy-to-make snack option with a focus on health. Jelly Plop is made with konjac but provides a low-calorie and low sugar which are an alternative to support hydration. Jelly Plop will appeal to a variety of consumer groups including children, parents, fitness enthusiasts and busy professionals who may be looking for a quick and nutritious snack. The project will see Jelly Plop developed from concept to consumer, to explore unique formulations and health benefits, packaging innovations to succeed in the modern food industry

2.1 Problem statement

In a world where “convenience”, consumers especially students, working adults and busy individuals, are finding it difficult to find nutritious snacks. Most of the existing snack products on the market are high in sugar and there are many jelly-based snack products that would be considered children’s snacks, most of which contain artificial ingredients, food colorings and preservatives that may not be desirable to some health-conscious consumers. Accordingly, there is an opportunity to develop functional jelly products that have fun, enjoyment, taste and addition to health.

In addition, hydration and preventative health are emerging concerns, especially among consumers on the go, those who do not drink enough fluids or take enough vitamins during the day. The lack of a product for this potential consumer that provides quick energy, is made with natural ingredients and provides a pleasant sensory experience, while still being good for their health has limited the options for this consumer base. Jelly Plop helps consumers solve this issue, providing potential consumers with low-calorie fruit-based jelly snacks packaged in easy-to-carry.

As a result, the purpose of developing the Jelly Plop food product is to provide consumers with a new food product initiative to reduce their frequent intake of unhealthy snacks. Jelly Plop will function by providing a variety of flavors, nutritious in nutrition and convenience. It will help meet the needs of modern consumers who are looking for snacks that are suitable for daily use.

2.2 Methodology

(Who): For the sensory evaluation and feedback for Jelly Plop, a group of 20 untrained panellists, consisting of students and young adults between the ages of 12 and 25, were selected as panellists. The panellists were selected based on the target consumer group for Jelly Plop, and in particular their busy lifestyles and general consumption of ready-to-eat snacks.

(When): Sensory acceptability testing and data collection will be conducted on 31 December 2025 during an unsupervised community visit by the product development team. The session will be completed within 1 hour and after all hygiene and screening procedures.