

P-Bar: Peanut-Based Snack Bar Innovation as Nutritious Food and Entrepreneurial Opportunity

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Abstract. Indonesia has great potential in developing nutritious local foods, one of which is peanuts which are rich in protein and healthy fats. This study aims to develop "P-Bar" as a peanut-based snack bar that has the potential to be a nutritious food as well as an entrepreneurial opportunity based on local ingredients. The study used participatory study methods and literature studies through product manufacturing, promotion, and sales activities. P-Bar is made using the main ingredient of peanuts combined with powdered milk, margarine, sugar, eggs, and wheat flour. The protein and healthy fat content in peanuts make P-Bar a potential nutritious snack and a practical source of energy for the body. Sales results showed that 45 pieces of the product were successfully sold with a total revenue of Rp270,000 and a profit of Rp170,000 from a production capital of Rp100,000. These results indicate that P-Bar has the potential to be developed as a local food product with economic value and support the development of local food-based entrepreneurship.

Keywords: Snack Bar, Peanuts, Nutritious Food, Entrepreneurship

1 Introduction

Indonesia possesses a diverse array of local foods with significant potential for development into nutritious and economically valuable products [1]. Among these, peanuts are a widely available and commonly consumed ingredient. Peanuts provide plant-based protein, healthy fats, vitamins, and minerals, which are beneficial for human health, making them a promising base for innovative food products [2]. In addition to their nutritional value, peanuts are affordable and accessible throughout various regions of Indonesia. They contain approximately 25-30% plant-based protein and healthy fats, serving as an important energy source [3]. This composition positions peanuts as a suitable raw material for the creation of practical and nutritious foods. Moreover, the utilization of local foods can enhance the added value of agricultural commodities and contribute to national food security [4].

With the evolution of modern lifestyles, demand for practical and nutritious foods continues to rise. Consumers increasingly prefer food products that are convenient, flavorful, and capable of meeting daily energy requirements. Snack bars, which are typically composed of cereals, nuts, and other ingredients, have emerged as a popular choice due to their practicality and ease of consumption [5]. Despite this, the majority of snack bars available in the market rely on imported raw materials and are sold at relatively high prices, limiting accessibility for some consumers. The potential of peanuts as a primary ingredient in innovative, locally sourced food products remains underutilized, despite their nutritional benefits and affordability. Consequently, there is a need to develop snack bar products utilizing local food ingredients that are nutritious, practical, economically valuable, and competitive as modern food alternatives for the community.

Furthermore, peanut-based products also have the potential to become functional foods. Functional foods are foods that not only meet basic nutritional needs but also provide health benefits [6]. The nutritional content of peanuts makes this product potentially useful in meeting the community's energy and nutritional needs. Beyond nutritional aspects, the development of local food products also offers significant entrepreneurial potential. The development of local food entrepreneurship can be explained through the concept of food entrepreneurship, which emphasizes product innovation based on local resources to create added economic value and market competitiveness. Furthermore, the concept of local food commercialization holds that using local ingredients to create modern products can increase sales, expand markets, and support the sustainability of community-based businesses.

Several previous studies have developed snack bars based on local food ingredients, but the development of peanut-based snack bars combined with entrepreneurial aspects is still limited. Therefore, innovation in local food products is needed that are not only nutritious and practical, but also have economic value and good business opportunities.

2 Literature Review

Nutritious food is food containing essential nutrients such as protein, fat, carbohydrates, vitamins, and minerals, which the body needs to maintain health and growth [7]. One local food ingredient with the potential to be developed into a nutritious product is peanuts, as they contain around 25-30% vegetable protein and healthy fats that serve as a good source of energy [3].

Peanuts can be processed into various practical food products, one of which is snack bars. The nutritional content of peanuts makes peanut-based snack bars a potential healthy snack alternative. Previous research has shown that peanut-based snack bars have a relatively high protein content and are well-received by consumers due to their practicality and ease of consumption [8].

The protein content in peanuts helps support the growth and repair of body tissue, while the healthy fat content acts as an energy source [5]. Furthermore, peanuts contain vitamins and minerals that support the body's metabolism, making them suitable for use as a functional food ingredient. Furthermore, this product can be categorized as a functional food. Functional foods are foods that not only meet basic nutritional needs but also provide health benefits [6]. Therefore, the protein and healthy fat content in peanuts makes peanut-based products potentially suitable for supporting the body's energy and nutritional needs.

In addition to its nutritional benefits, developing local food-based products also offers entrepreneurial potential. Practical, nutritious, and marketable food products can create economically viable business opportunities [9]. Therefore, P-Bar was developed as an innovative peanut-based snack bar that not only supports nutritional needs but also has potential as a local food entrepreneurship product. Within the concept of food entrepreneurship, product innovation is crucial for achieving product differentiation and increasing consumer interest in local foods. Local food commercialization strategies also emphasize the importance of packaging, digital promotion, and product adaptation to modern food trends to ensure product competitiveness in the market.

3 Method

This research used a participatory study approach and a literature review. The participatory study involved the researchers' direct involvement in the manufacturing, development, promotion, and sales of the P-Bar product, a peanut-based snack bar. Meanwhile, the literature review included reviewing various references related to the nutritional content of peanuts, snack bar development, functional foods, and local food-based entrepreneurial opportunities. The research was conducted near the University of Bengkulu on April 29, 2026.

The research method involved hands-on experience in product processing and local food-based entrepreneurial activities. The ingredients used in the P-Bar production process include peanuts, powdered milk, margarine, sugar, eggs, wheat flour, and product packaging. The formulation of the ingredients used can be seen in Table 1 below:

Table 1. Ingredients Formulation for Making P-Bar

Ingredients	Amount	Cost
Peanuts	1000 g	Rp30.000
Powdered milk	200 g	Rp20.000
Margarine	150 g	Rp10.000
Sugar	250 g	Rp5.000
Eggs	3 pcs	Rp6.000
Wheat flour	300 g	Rp3.000
Package	50 pcs	Rp26.000
		Total Rp100.000

The tools used in this study included an oven, baking pan, spatula, mixing bowl, blender, and digital scale. The stages of activity included:

- a. Product production, namely the P-Bar manufacturing process, from ingredient preparation, roasting peanuts, grinding ingredients, mixing dough, molding, to baking and packaging.
- b. Product promotion and sales, namely introducing and selling P-Bar to the public directly and through social media, to determine the product's appeal and potential for development as a nutritious food business based on local ingredients.

- c. Data collection and analysis were conducted through observation during the product manufacturing and sales process, documentation of activities, and recording sales results. The data obtained were analyzed descriptively to determine product characteristics and the business potential of P-Bar as a peanut-based snack bar. Data validity was maintained through simple triangulation between field observations, activity documentation, and product sales records. Data reliability was ensured by consistently recording sales throughout promotional and marketing activities. Furthermore, consumer feedback was recorded directly after purchase to ensure the data matched field conditions.

4 Results and Discussion

The P-Bar product development activity was carried out around the University of Bengkulu through the process of making and marketing peanut-based snack bars as a nutritious food and entrepreneurial opportunity. The activity was carried out flexibly by adapting to conditions in the field so that all stages could run smoothly. The initial stage of the activity began with the production of P-Bar, from the preparation of ingredients to the roasting process and product packaging. The manufacturing process begins with roasting peanuts to enhance the aroma and distinctive taste of peanuts. After that, the peanuts are peeled and ground before being mixed with other ingredients to form a homogeneous dough. The dough is then molded into bars and baked to produce a product with a crispy texture and an attractive golden color.



Figure 1. P-Bar Manufacturing Process

The product results show that P-Bar has a distinctive savory peanut flavor with a crunchy texture. The protein and healthy fat content in peanuts make this product a potential nutritious food alternative and a practical energy source. Protein plays an important role in supporting the growth and repair of body tissue, while healthy fats serve as a source of energy for the body [10]. The nutritional content claims in this study are based on literature data regarding the nutritional composition of peanuts from previous studies, so they are still in the form of potential nutritional content of raw materials and do not yet show the final nutritional content of the P-Bar product in the laboratory.

In addition to the product manufacturing process, product promotion and marketing activities were also carried out directly and through social media. Direct marketing was carried out by offering the product to the community and students around the University of Bengkulu so that consumers could see and try the product directly.

Meanwhile, promotion through social media was carried out by sharing product photos and information to attract a wider consumer audience. The use of social media was deemed effective because it can help introduce the product more quickly and easily to the public. During promotional activities on social media, product posts generated increased consumer interest, demonstrated by inquiries about price, flavor, and ordering. Furthermore, some consumers learned about the product through social media before making a direct purchase, thus digital promotion contributed to increasing the product's marketing reach.

Based on observations during sales activities, the majority of consumers responded positively to the P-Bar product, particularly regarding its distinctive savory peanut flavor, crunchy texture, and practical product format. This indicates that the product has considerable appeal as a modern snack based on local food. A product image is shown in Figure 2. However, this study did not use structured sensory tests such as hedonic tests or consumer preference scales, so the product evaluation remained observational. The use of structured sensory methods in future research is needed to improve the scientific validity of product quality assessments.



Figure 2. P-Bar Product

Sales results show that 45 P-Bars were successfully sold at a price of Rp6,000 per piece. The total revenue earned was Rp270,000, while the production capital used was Rp100,000. Based on simple calculations, the profit earned was Rp170,000. This shows that P-Bar has a fairly promising business opportunity because it can be produced at a relatively low cost but has a good selling value. The use of easily obtained local raw materials is also a factor that supports production cost efficiency. Product sales activities are shown in Figure 3. Simply put, the profits obtained indicate that the business has a positive sales margin. However, this study does not include a more in-depth entrepreneurial analysis, such as Break Even Point (BEP), Return on Investment (ROI), or long-term market sustainability analysis, so the feasibility aspect of the business still requires further study. Although the product formulation still uses wheat flour as a supporting ingredient, the main component of the product still comes from local peanuts, which dominate the product's taste characteristics and value. The use of wheat flour aims to improve the texture and stability of the product, while the concept of local food innovation in this study is more focused on optimizing the main local commodity as the product's basic ingredient.

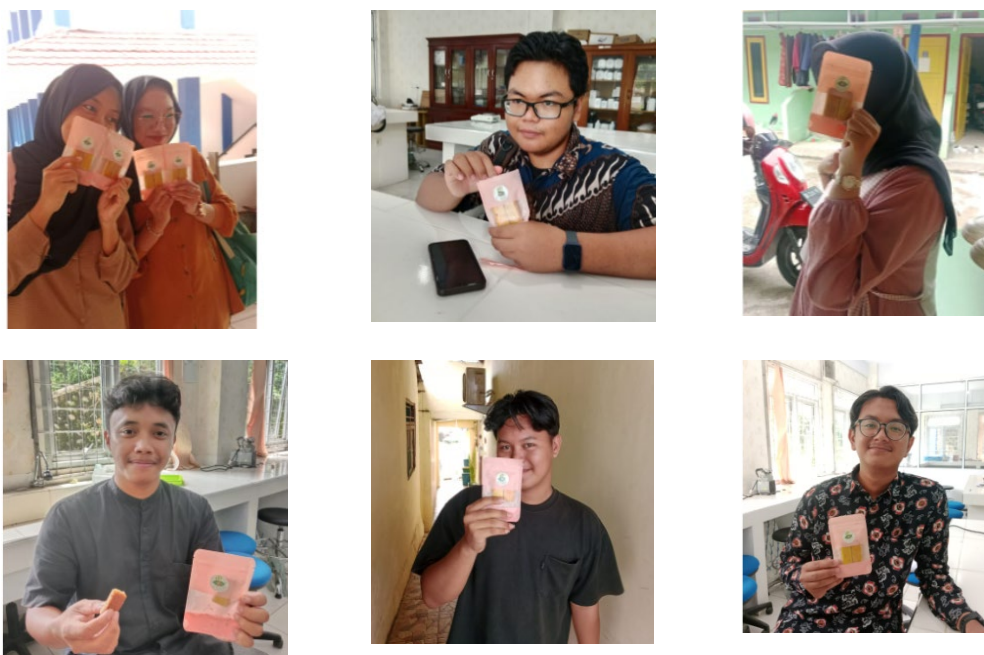


Figure 3. P-Bar Sales Activities

The product's sales success demonstrates P-Bar's appeal in terms of taste, shape, and practicality. Furthermore, the use of readily available local raw materials is also a key advantage in business development. The potential for product development remains wide open through innovative flavor variations, more attractive packaging designs, and more modern marketing strategies, all of which can enhance the product's competitiveness in the market. Thus, P-Bar not only has the potential to be a nutritious peanut-based food but also offers significant potential for development as a locally sourced, economically valuable entrepreneurial product. The results of this study align with previous research, which found that nut-based snack bars have the potential to be a convenient food with good nutritional value and significant market potential. Furthermore, digital promotional strategies and the use of local ingredients have also been reported to increase product appeal and support the development of local food entrepreneurship. It is also necessary to carry out training activities in order to increase public interest in developing culinary products [11].

5 Conclusions

Based on the activities conducted, it can be concluded that P-Bar, an innovative peanut-based snack bar, has the potential to be a nutritious food and a local food-based entrepreneurial opportunity. This product contains protein and healthy fats, which can serve as a practical source of energy for the body. Furthermore, P-Bar has a savory taste, a crunchy texture, and a practical shape, making it potentially popular. Marketing results indicate that P-Bar has good business potential. A total of 45 units were sold, generating a profit of Rp170,000 from a production capital of Rp100,000. This demonstrates that locally sourced products can be developed into an economically viable business with relatively affordable production costs.

This research still has limitations, as laboratory nutritional analysis has not been conducted. Furthermore, P-Bar production is still small-scale, requiring further development to determine the potential for larger-scale production. Further research is recommended to conduct proximate analysis, structured sensory testing, and a more comprehensive business feasibility analysis so that the scientific quality and commercialization potential of the product can be more strongly proven.

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