

Palembang Floss

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Abstract: Palembang Floss was inspired by one of the Java dishes which is Daging Palembang. It is in floss form and enriched with habbatus-sauda to increase the nutrient content. The objectives of the innovation are to introduce a better version of Daging Palembang that originated from the Java community and to diversify the usage of waste ingredients in meat floss. The marketing and commercialization of this new meat floss could increase the value of local waste ingredients such as jackfruit straw. Palembang Floss is produced to fulfill the current demand as consumers can consume similar products like Daging Palembang throughout the year in the simplest way by consuming as it is due to its longer shelf life. Other ingredients include meat, tapioca, red onion, garlic, ginger, chili paste, and a variety of types of seasoning. The usage of jackfruit straw enables to reduce the solid waste as it is being treated for use in floss making. Besides that, it helps to improve the environment as well as assist farmers to gain more income. Habbatus-sauda or scientifically known as *Nigella sativa* contained an abundance of active ingredients useful for anticancer, asthma, hypertension, fever, dizziness, and gastrointestinal disturbances. The preparation of the floss started with all ingredients being sauteed until fragrant and thick before adding meat and pouring some broth into it. Then, fried tapioca and raw jackfruit straw were added. The mixture was stirred until dry. Finding on sensory evaluation affective test ($n=60$) using 9 scales with 3 different samples (V1, V2 & V3) comprising five attributes i.e. color, aroma, firmness, flavor, and overall acceptance indicates Palembang Floss with tapioca and jackfruit straw (V3) was the most preferable product with the higher mean score (7.60) compare to V1 (added tapioca; 7.48) and V2 (added jackfruit straw; 7.20). Palembang Floss tastes better with bread, white rice, or ketupat attributed to the product's cost-effectiveness and convenient production procedure, which also makes it suited for mass production.

Keyword: floss; traditional food; jackfruit straw; tapioca; habbatus-sauda



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1. INTRODUCTION

Food industries and merchants commonly discard jackfruit straws as garbage, posing a severe environmental risk (Muslimah Solehah et al., 2019). Jackfruit straw waste created by jackfruit or scientifically known as *Artocarpus heterophyllus* shows potential as a bio-based film including starch to reduce waste and negative environmental effects (Muslimah Solehah et al., 2019). Tapioca, on the other hand, is widely known in Malaysia but unfortunately, it gives low monetary value to the farmer. Thus,

Palembang Floss was produced to help improve the environment as well as assist farmers to gain more income.

Palembang Floss consists of Daging Palembang, jackfruit straw, tapioca, and habbatus-sauda as the main ingredients. Habbatus-sauda or scientifically known as *Nigella sativa* is rich in medicinal value and has been used as a natural remedy by the Mediterranean region during the ancient time (Nur Farahim et al., 2013). Habbatus-sauda contains an abundance of active ingredients useful for anticancer, asthma, hypertension, fever, dizziness, and gastrointestinal disturbances (Gimbun et al., 2014). It has widely been used in cooking too. This Palembang Floss; a unique recipe from Java is added and spiced with habbatus-sauda to make it more nutritious. The mixed aroma of soup leaves, fermented shrimp paste, soy sauce, habbatus-sauda, and black pepper enhance the overall taste of the product since it is spicy, and sweet, and satisfies the Asian taste.

Daging Palembang originated from the Java people's culture. Hence, Palembang Floss, it does not only create awareness in the public regarding Java culture but also preserves the food heritage. Palembang Floss is a type of "serunding" (shredded meat, meat floss, meat fiber, desiccated meat) and one of the traditional meat based-product popular among Malaysian and the Asian community (Huda et al., 2012).

Palembang Floss prioritizes people who love ready-to-eat food where people can eat on the go. It is suitable for breakfast or lunch as the dry texture makes it easy to handle. It can be consumed by several age groups starting from primary schools' level 2 (10-12 years old) to senior citizens. Palembang Floss can be eaten together with bread, rice, and ketupat as an accompaniment, or eat it on its own. The price of the product is affordable since the cost of producing it is cheaper with the utilization of jackfruit straw and tapioca. Interestingly, with the attractive product packaging, Palembang Floss is also suitable all year round for presents as a hamper or during festive seasons.

2. METHOD & MATERIAL

The cooking process used in this product mainly focuses on the traditional braising of the product until dry, flaky, golden, and fragrant. It is somehow like making "rendang" or "serunding". The slow cooking process creates caramelization of the jackfruit straw which imitates the beef in appearance.

Palembang Floss's main ingredients were jackfruit straw, tapioca, and habbatus-sauda. The floss-making starts with grating the tapioca and frying it for about 5-8 minutes until it gives a light brown color. Then, mix them with fresh raw jackfruit straw and habbatus-sauda seed. Other materials used were red onion, garlic, ginger, tenderloin, chili paste, sugar, salt, fermented shrimp paste, broth, tamarind peel, dark soy sauce, black pepper powder, and soup leaves.

3. FINDINGS

To substitute the meat used in the typical meat floss, jackfruit straw was chosen as the texture is almost similar to meat when being chewed. The flavor of jackfruit straw itself enhances the Palembang Floss with its caramelized straws along with tapioca flesh to reduce the spiciness.



Figure 1. Palembang Floss

Floss or “serunding” is commonly consumed during festive occasions such as Hari Raya Aidilfitri, Hari Raya Qurban, or even weddings and family gatherings. With this product innovation, it can save time in producing the original product. Furthermore, with the use of tapioca, local farmers would benefit more when it is used in mass. Jackfruit straw itself is not so common food or fruit part to eat and commonly become waste but, with this floss making, it can lessen the waste created while providing a new taste, fusing food style, as well as harmonizing Javanese food with something new but still maintaining the original flavor.

4. DISCUSSION

Palembang Floss nowadays is simply different from the original recipe from the Java ancestor. With a little spice of innovation and technology, it helps to enhance the taste and give longer shelf life. What makes the combination of tapioca and jackfruit straw better is the nutrient itself. Tapioca is widely known as rich in starch and is derived from cassava. The original recipe for Palembang is the one that uses meat tenderloin. However, to make it more green-friendly and for a better sustainable environment, researchers are using tapioca. In addition, to get the same texture and taste, shredded tapioca was fried and when it combines with the gravy of Palembang Floss, it absorbs the water from the gravy.

Tenderloin may contribute 324 kcal per 100 grams, however, tapioca only contains 130 kcal per 100 grams. Another benefit is it has a high content of calcium that is good for bones and prevents the growth of osteoporosis (WebMD Editorial Contributors, 2020).

The jackfruit straw part has not been properly utilized. These foods are high in fiber and can be processed as food even though the color of the jackfruit straw is one of the weaknesses of its attribute (Sayuti et al., 2015). But the color is not a problem for this product since the Palembang Floss itself is produced in dark brown color due to the soy sauce. The ideal combination of tapioca and jackfruit straw is to enhance the nutrient content and add the natural taste and odor of the jackfruit into the dish. Jackfruit straw waste created by jackfruit or scientifically known as *Artocarpus heterophyllus* has a smell that gives a well-balanced taste.

5. CONCLUSION

Palembang Floss is a great alternative to other types of floss in the market. This food innovation is currently part of the food trend in this 21st century as it promotes food on the go and is more convenient as well as hassle-free. Besides emphasizing the Java culture’s traditional food, it is suitable to be eaten all year round. It is affordable for every person to buy since the usage of tenderloin is being substituted with tapioca and jackfruit straw. This product could be the choice side dish or even as the main meal due to its high content of carbohydrates and fiber. Besides, the best part of it was not a seasonal food which means consumers can buy it whenever they want. As an entrepreneur, it would

give more profit since this product is using waste ingredients and innovating it into a perfect meal for every occasion, especially for Malay celebrations.

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