PARISIAN FLAN WITH RICE BRAN FLOUR AS A *DESSERT*

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ABSTRAK

Research objectives: (1) Knowing the composition and the right proportion ofproducts *parisian Flan* with substitute bran flour. (2) Knowing the community's acceptance of theproduct *Parisian Flan* by substituting bran flour. (3) Knowing the nutritional value information onproducts *Parisian Flan* with substitute bran flour. The research method used in this study is *Research and Development (RnD)* with a 4D development model (*Design, define, develop, dissemination).* The recipe used in making *Parisian flan* bran is a recipe belonging to Chef Cedric (Cinema Bakery). Bran flour used as a substitute in this product as much as 30%. This product received an assessment of 3,825 based on the form assessment at the 2019 Final Project Exhibition which means this product is very popular and acceptable to the wider community. The biggest nutrient content in *ParisianFlan* Branis carbohydrate as much as 32.50545%. This proves that bran flour can be processed into a food ingredient and contains a fairly high nutrient content.

Keywords: *Parisian Flan Bekatul*, tepung bekatul

PENDAHULUAN

Indonesian society has a high dependence on the use of wheat flour in daily food, we can see almost in various types of processed foods using flour that we obtain through this import, namely flour, Indonesia is not a State who can produce flour by themselves. Therefore, the State must definitely import flour to meet people's needs.

Indonesia has enormous potential for local food but this potential has not been utilized properly. Indonesia still imports a lot of basic food ingredients, whereas imports should be suppressed. The high consumption of instant noodles, cakes, and other flour-based foods, makes imports of wheat flour quite large every year. The United States Department of Agriculture (USDA) estimates that Indonesian wheat imports in 2016 reached 8.10 million tons, up by around 8% from the previous year of 7.48 million tons.

With that much import, Indonesia is the world's second largest wheat importer after Egypt. Wheat flour is made from wheat seeds while wheat flour is made from whole wheat. This makes wheat flour has a smoother texture and higher gluten and elasticity compared to wheat flour. Gluten itself is a type of protein found in flour and wheat. Based on the gluten level, this flour is divided into high protein wheat flour, medium protein flour and low protein flour. High protein flour has the highest gluten level, which ranges from 13% - 14% so it has the ability to bind and trap gas well which makes the dough expand perfectly and the texture is more supple.

Medium protein flour has gluten content ranging from 11% - 12% and is often used as versatile flour in food manufacturing. Low protein flour has the lowest gluten level of no more than 11% and is very good for making cookies.

The advantages, this type of wheat flour has a longer resistance due to low protein levels. Rice bran is one of the by-products of a large number of rice milling processes. In the grinding process, broken rice is obtained from the side yield of 8-9% bran and bran around 2-3%.

In addition, the Department of Agriculture (2002) also states that the availability of rice bran in Indonesia is quite large and reaches 4.5-5 million tons each year, besides bran is a natural healthy food

containing antioxidants, multivitamins and high fiber to prevent degenerative diseases also rich in starch, protein , fat, vitamins and minerals (Damayanthi, Tjing & Arbianto, 2007).

Rice bran is a byproduct of the cracked rice milling process which consists of a layer of wrinkle wrapping, a small number of institutions and endosperm. Utilization of rice bran is still limited as a food with low economic value but actually bran can be used as food. This is because rice bran has a high nutritional value of 11.8-13% protein, 10.1-13.4% fat, 2.3-3.2% fiber, and 51.1-55% carbohydrate.

In addition, rice bran is also rich in vitamins and minerals such as calcium, magnesium, phosphorus, zinc, thiamin, riboflavin, and niacin. Utilization of rice bran as a food product in Indonesia is still very limited, for example as traditional food porridge or rice bran and rice bran. Currently bran is more widely used as animal feed. Bran is sometimes also a waste that pollutes the environment, especially in rice production centers when harvesting the rainy season (Widowati, 2001).

This situation is very different from some other countries in the world, such as the United States and Japan, which have developed many bran asproducts food, for example as breakfast cereals and rice bran oil.

The opportunity to develop bran as a functional food is still very open. This is because the number of milled dry grain production in Indonesia reached 75.36 million tons in 2015 (BPS, 2016), so that the amount of rice bran that can be used is approximately 6-7.54 million tons (rice bran produced from rice mills is around 8 - 12 percent).

Based on the above problems, then the idea was formed to make aproduct *patiserie* made from bran flour. The processed product that will be tested in the final project this time is ubstitution of bran flour inproducts *pate brisee* as a *base* in the processed parisian continental *patiseri Flan fillings* with the addition of namely jam *strawberry*, it is hoped that this product can be a new innovation that is the choice of people who have delicious taste and have more interesting presentations, and introduce to the community how to use local food.

METHOD

The Research Method

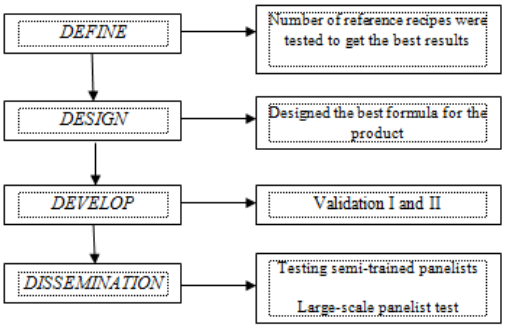
Final Project has the aim of reviewing and developing patriarchal products by utilizing bran so that the expected end result is patiseri products with quality bran flour ingredients. To achieve this goal, a good research and development method, product research and development model (*Research and Development*) is needed with a 4D development model which stands for *Define*, *Design*, *Develop* and *Dissemination*.

In step d*esign* defined product that will be developed include materials and product characteristics. To get the criteria *Parisian Flan* desired, a number of reference recipes were tested to get the best results.

At the stage of d*efine* , the right formula and product formula is designed. After finding the reference prescription that is considered the most product of *Parisian Flanet Flan* suitable, the reference recipe will be changed according to filling in the form.

At the stage *develop*, the practitioner will conduct an *expert appraisal* about the products of the *Parisian Rice Bran* and make changes according to the input from the *expert* (Validation I and II).

Products that have passed the validation phase II will enter the limited-scale panelist test stage, namely theacceptance test*Dissemination*. Entering and suggesting when testing semi-trained panelists will be a consideration to make changes to the product before a large-scale panelist test (general public) is carried out during the exhibition.



Picture 1 Research Method

Materials

In this test are 2 kinds of products and water for neutralizing, while sensory testing tools in the form of preparation and sample presentation tools and communication tools between panelists and researchers in the form of blanks or assessment instruction forms (forms). The sample tool that will be used is mica. For communication between panelists and researchers is forms and stationery.

Data Sources

In this study, researchers used several panelists as data sources. Panelists gave an assessment of the texture, taste, color, aroma and likeness of the products of the *Parisian Flanet Flan* by filling in the forms. The data sources are presented in table 1.

Table 1 Data Sources

No	Research Phase	Data sources	Amount
1.	Presentation I : The Proposals	Expert	3 people
2.	Validation and Revision	Expert	2 people
3.	Presentation II : Sensory test	Semi-trained panelist	30 people
4.	Presentation III : Exhibition	General public	80 people

Data Analysis

Analysis of the data used in this research method is the analysis of qualitative and quantitative data. Data obtained from the results of product acceptance tests in the form of qualitative data and quantitative data. Qualitative data is data that cannot be measured and contains panelist comments on the color, taste, texture, and presentation of the product.

Quantitative data, namely data that can be measured is obtained from the receipt of 50 panelists for the products received and products that are not received. The test results data were then analyzed descriptively. The score scores of the panelists can be criticized in being very disliked, disliked, liked and very liked.

DISCUSSION

Research Results

This study was conducted to find out how the public acceptance of the products of *Parisian Flanet Flan.* To achieve these objectives, theresearch method is carried out *Research and Development* which consists of four stages, namely *Design, Define, Develop and Dissemination.*

Design

At this stage a number of reference recipes are tested to get the best results. The three best recipes are obtained from *Cinema Bakery* by *Chef* Cedric (R1), the book "Let's Make Cuisine & Cake from Halal Materials" by Diah Mumpuni (R2), and via the video from the website https://bake-street.com/en (R3)

Table 2 Recipe for Reference to *Parisian Flan*

Name of Material	R1	R2	R3
Wheat flour	1500 gr	250 gr	250 gr
Maizena flour	420 gr		
Egg	15	1	1
Gula Pasir	750 gr		25 gr
Milk	1 lt		
Salt	25 gr		2.5 gr
Butter	425 gr		165 grgr
Margarine	800	125 gr	
Fine Sugar		50 gr	
ice water		50 ml	

Define

At this stage, designing recipe formulas and designing the right product. After finding

the reference recipe that is considered the most suitable, then the reference recipe will be changed according to the flour to be substituted in theproduct *Parisian Flan*. The design ofrecipe *Parisian Flan* with substitution offlour *bran* as much as 25%, 30%, and 50% is available in table 3.

Tabl e 1 Development Recipe for *Parisian Flan*

Material Name	Referenc e	25%	30%	50%
Wheat Flour	1500 gr	1125 gr	1050gr	750 gr
Bran flour		375 gr	450 gr	750 gr
Maizena flour	420 gr	420 gr	420 gr	420 gr
Eggs	15	15	15	15
Sugar Sand	750 gr	750 gr	750 gr	750 gr
Milk	1 lt	1 lt	1 lt	1 lt
Salt	25 gr	25 gr	25 gr	25 gr
Butter	425 gr	425 gr	425 gr	425 gr
Margarine	800 gr	800 gr	800 gr	800 gr

Develop

At this stage, the practitioner will conduct an *expert appraisal* aboutproducts *Parisian Flan* and make changes according toinput *expert* (Validation I and II).

. The product testing process includes making products, testing products by 2 experts, processing data analysis and test results, and then making improvements to the product.

Based onjudgment *expert* based on color, aroma, taste, and texture of *Parisian Flan* with substitution of bran flour as much as 30% can be tested at the next stage, namely *dissemination.*

Dissemination

Products that have passed the validation phase II will enter the limited-scale panelist test stage, namely the acceptance test of 30 semi-trained panelists. Reference products are coded 202 and substituted products are coded 303.

The table shows that semi-trained panelists prefer reference products to substitute products. The reference product received a score of 3.57 on the color assessment, 3.03 on the scent assessment, 3.16 on the taste, 3.2 on the assessment of texture, and the overall product scored 3.3.

30% bran substitution products got a score of 2.63 in terms of color, 2.87 in terms of aroma, 2.8 in terms of taste, 2.76 in terms of texture and overall substitution products scored 2.86.

After passed the test panelists limited scale, the products presented in the exhibition Boga Final Project on April 25, 2019. A total of 80 samples of the product and accreditation forms dibagiakan votes to visitors or untrained panelists. Results of Final Project Catering 2019 exhibition is presented in Figure 3.

Table 2 Results Exhibition Final Project

Characteristics	Rating	Description
Color	3.7625	Highly preferred
Aroma	3.7	Very preferably
Texture	3.725	Very preferably
Flavor	3.85	Very preferably
Overall	3.825	Very preferred

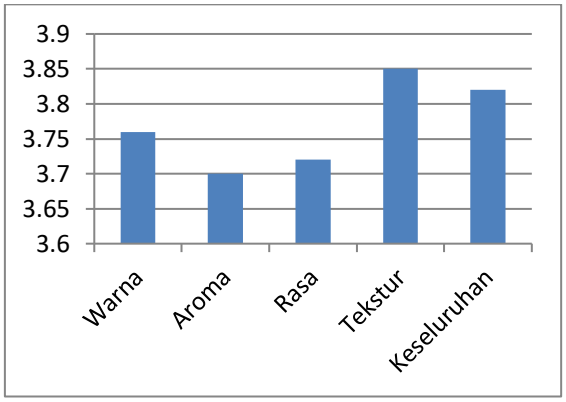


Figure 1 Results Final Project Exhibition

Based on the picture, it can be seen that the visitors really liked the texture of the *Parisian Bran Flan* which received an assessment of 3.85. Then in terms of color the rating was 3.7625, in terms of taste, it was valued at 3.725, 3.7 in terms of aroma and overall score of 3.825. This means *Parisian Flan Bran products* with 30% substitute of bran flour can be accepted by the public.

Discussion

To find out the nutritional value of *Parisian Bran Flan* , a proximate analysis test

was conducted on April 12, 2019 at the Chem-Mix Pratama Laboratory in Yogyakarta. The proximate analysis results are presented in table 5.

Table 3 Proximate Analysis Test Results

Analysis	Amount
Water	43.6557%
Abu	1.78035%
Protein	8.37245%
Fat	6.8378%
Crude Fiber	6.8615%
Carbohydrate	32.50545%
Energy	222.88705 kal / 100 gr

The largest nutrient content in *Parisian Flanin Flan* is as much carbohydrate as 32.50545%, then protein 8.37245%, crude fiber .8615%, fat 6.8378%, and ash 1.78035%. *Parisian Bran Flan* contains energy of 222.88705 kal / 100 gr and water of 43.6557%.

CONCLUSION

Based on the research that has been done, it can be concluded that bran flour can be processed into food that is liked by many people. So that more innovation is expected to use bran flour as food so that it can reduce the import value of wheat flour.

Parisian Rice bran with 30% substitution of bran flour can be accepted by the public. Thenutritional content of *Parisian Bran Flan* biggestfrom carbohydrates is 32.50545%.

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