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APPENDIX

1. Approved Recipe

Recipe Name : GLUTEN FREE FRUIT PIE
TITLE OF C&D : UTILIZATION OF RED BEAN FLOUR AND MUNG BEAN
FLOUR FOR GLUTEN FREE PIE
Yield : 9 - 15 portion
Main Ingredients : 40gr mung bean flour & 47gr red bean flour

PIE CRUST -> 10 portion

Ingredients :

- 40 gr mung bean flour
- 47gr red bean flour
- 12gr sugar
- 40gr butter
- 7gr egg yolk
- 20ml water
- 1/4 tsp salt
- 2gr egg white

Method :

1. Mix the red bean flour, mung bean flour and sugar in a bowl
2. Add the fat and rub it in until resemble a fine breadcrumb
3. Beat the egg yolks and white egg with water and salt. Add to the flour mixture. Mix until completely absorbed
4. Roll to a half cm thin and cover the pie tin, poke lightly with forks
5. Blind bake the crust
6. Bake in a 175°C oven for about 15-18 minutes

PIE FILLING -> 15 portion

Ingredients :

- 125gr milk
- 1 egg yolk
- 15gr granulated sugar
- 10gr cornstarch
- 100ml whipped cream
- 1/4 tsp vanilla essence
- 300gr longan

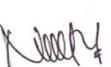
Method :

1. In a heavy saucepan, bring the milk to just a boil.
2. With a mixer, beat the egg yolks and sugar in a stainless bowl, stir in the cornstarch and sugar into the eggs. Beat until perfectly smooth.
3. Temper the egg mixture by slowly beating in the hot milk in a thin stream.
4. Return the mixture to the heat and bring to a boil, stirring constantly. When the mixture come to a boil and thickens, remove from the heat.
5. Cover and let it cool down completely. Once cold, beat well until perfectly smooth.
6. Beat the whipping cream with a drop of vanilla essence and fold into the cold pastry cream mixture.
7. Cut half of the longan into small pieces to mix into the cream and the rest as a topping

RECIPE BACKGROUND (50 – 100 WORDS)

Pie is a dessert that is liked by many people. Pie filling can be sweet or savory. Here I do research and development with red bean flour and mung bean flour as a substitute for the main ingredients of the pie crust. Both flours have many advantages, one of which is gluten free. In addition, the two beans are lower in fat which is good for helping you lose weight. For the filling, I chose to use fruit because it tastes fresh and helps reduce the rather strong bean flour taste.

Student Name : Aurelia Violin Tanjung
NIM : 2174130010027

1 st Advisor	2 nd Advisor	3 rd Advisor
 Name: Nevi Indah Permata Sari Date:	 Name: Ryan Yeremia Istiantoro Date:	 Name: Gilbert Yanuar Hadiwulan Date:

2. Approved Sensory

 <p>Akademi Kuliner & Patiseri OTTIMO INTERNASIONAL CULINARY ARTS GASTRONOMY BAKING & PATISSERIE</p>	<p>CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST</p>																																																																						
<p>DATE : 6 April 2023 NAME : Aurelia Violin Tanjung NIM : 2174130010027 PRODUCT : Pie gluten free ADVISOR : Novi Indah Permata Sari, S.T., M.Sc</p>																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PANELIST</th> <th>SIGHT</th> <th>SMELL</th> <th>TEXTURE</th> <th>TASTE</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr><td>Panelist 1</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 2</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 3</td><td>✓</td><td>✓</td><td>X</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 4</td><td>✓</td><td>X</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 5</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 6</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 7</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 8</td><td>✓</td><td>✓</td><td>X</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 9</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr><td>Panelist 10</td><td>✓</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> </tbody> </table>						PANELIST	SIGHT	SMELL	TEXTURE	TASTE	TOTAL	Panelist 1	✓	✓	✓	✓	✓	Panelist 2	✓	✓	✓	✓	✓	Panelist 3	✓	✓	X	✓	✓	Panelist 4	✓	X	✓	✓	✓	Panelist 5	✓	✓	✓	✓	✓	Panelist 6	✓	✓	✓	✓	✓	Panelist 7	✓	✓	✓	✓	✓	Panelist 8	✓	✓	X	✓	✓	Panelist 9	✓	✓	✓	✓	✓	Panelist 10	✓	X	X	X	X
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<p>NOTES :</p> <ul style="list-style-type: none"> • Aftertaste susu bubuk yang buruk pada produk yang manis harus di perbaiki karena bau dan aftertaste nya sangat buruk • Need more sweetness and crispier • After taste kulit piennya kuat bgt, sausnya susu skimnya strong bgt 																																																																							
																																																																							

3. Consultation Form



CONSULTATION FORM CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

No	Date	Topic Consultation	Name/ Signature
1.	20/03-23	Product & Ingredients	
2.	21/03-23	Product & Ingredients	
3.	22/03-23	Kriteria Produk	
4.	23/03-23	Product	
5.	24/03-23	Proposal format	
6.	25/03-23	Revisi: proposal	

Name : Amelya Veena Tanjung.....
Student Number : 2174130010023
Advisor : Novi Indah Permata Sari, S.T., M.Sc.

No	Date	Topic Consultation	Name/ Signature
7.	11/04-23	Bob IV & Packaging	
8.	12/04-23	Revisi: Proposal	
9.	13/04-23	Revisi: 2.2.2	
10.	14/04-23	Final laporan Proposal	
11.	15/04-23	Revisi: Final Report	
12.	16/04-23	Revisi: Final Report	

4. Systematic Process Documentation

Pie crust process :

- 1) Prepare all ingredients before starting



2) Mix the red bean flour, mung bean flour and sugar in a bowl



3) Beat the egg yolks with water and salt. Add to the flour mixture.



4) Mix until completely absorbed



5) Roll to a half cm thin and cover the pie tin, poke lightly with forks



6) Bake in a 175°C oven for about 15-18 minutes



Pie filling process :

1) In a heavy saucepan, bring the milk and add vanilla bean to just a boil.



- 2) With a mixer, beat the egg yolks and sugar in a stainless bowl, stir in the cornstarch. Beat until perfectly smooth.



- 3) Temper the egg mixture by slowly beating in the hot milk in a thin stream. Return the mixture to the heat and bring to a boil, stirring constantly.



- 4) When the mixture come to a boil and thickens, remove from the heat.



- 5) Cover and let it cool down completely. Once cold, beat well until perfectly smooth.
- 6) Beat the whipping cream and fold into the cold pastry cream mixture.



- 7) When the pie crust was cold, add three tablespoons of cream filling to the pie
- 8) Herve the longan then put on top of the pie as a topping

