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## APPENDIX

### 1. Approval recipe



#### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

##### APPROVAL RECIPE

Recipe Name : MUNG BEANS CEREAL  
C&D Title : UTILIZATION OF MUNG BEAN FLOUR AND KETO FLOUR AS A SUBSTITUTE FOR WHEAT FLOUR IN CEREALS

Yield : 8-10 Servings

Main Ingredients : 70 gr Mung Beans Flour

Ingredients :

- |                            |                      |
|----------------------------|----------------------|
| - 70 g of keto flour       | - 1,5 g baking soda  |
| - 70 g of mung beans flour | - 65 ml water        |
| - 50 g oatmeal flour       | - 15 ml orange juice |
| - 10 g milk powder         | - 5 g butter         |
| - 10 g cocoa powder        | - 5 g honey          |
| - 2,5 ml Vanilla essence   | - 5 g sugar          |

Method :

1. Mix green bean flour, keto flour, oatmeal flour, milk powder, baking soda, cocoa powder, sugar
2. Sieve the flour into the mixture and then add water, orange juice, melted butter, vanilla essence, and honey
3. After all the mixture is evenly mixed, flatten the dough approximately 6 mm
4. Bake at 180°C for 20 minutes, remove from the oven and slice array in baking pan and bake again at 150°C until crisp.

##### Product Description

This product is a cereal product based on mung beans and keto flour where the carbohydrate and sugar content in this product is very low and has a high protein content. Mung beans are rich in proteins that are essential for the growth and repair of body tissues. The protein it contains is easy to digest and good for maintaining



## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

muscle health. So, this product is perfect for growing children, dieters, or bodybuilders who are building muscle mass. This product can also be a practical and healthy snack or breakfast.

### TRIAL PROGRESS

Step one, mix mung bean flour, keto flour, oatmeal flour, milk powder, baking soda, cocoa powder, sugar in a medium-sized bowl. Then sift the flour into the mixture and then add water, melted butter, vanilla essence, and honey until well mixed. Then after all the mixture is evenly mixed, flatten the dough approximately 6 mm. Make sure the oven is hot, then Bake at 180°C for 20 minutes, remove from the oven . until crispy. After being taken out of the oven, the texture inside remained chewy. It was then put back in for another 10 minutes, but the cereal still lacked crispiness. In the second attempt, trying with smaller portions, the cereal ended up being too hard and not crispy.

### TRIAL DOCUMENTATION



## 2. Approved Sensory



Akademi Kuliner & Patiseri  
**OTTIMMO**  
 INTERNASIONAL  
CULINARY ARTS · GASTRONOMY · BAKING & PASTRY ARTS

### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

**DATE** : 22 April 2024

**NAME** : Septian Rio Iskandar

**NIM** : 2274130010067

**PRODUCT** : UTILIZATION OF MUNG BEAN FLOUR AND KETO FLOUR AS A  
 SUBSTITUTE FOR WHEAT FLOUR IN CEREALS

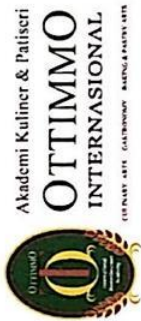
**ADVISOR** : Yohanna Prasetyo, A.Md. Par.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	4	4	2	1	3	14
Panelist 2	5	5	4	3	3	20
Panelist 3	2	4	3	4	3	16
Panelist 4	2	4	4	3	4	17
Panelist 5	4	4	4	5	4	21
Panelist 6	4	4	4	4	4	20
Panelist 7	4	4	4	4	4	20
Panelist 8	2	4	3	4	3	16
Panelist 9	4	4	4	5	4	21
Panelist 10	5	5	4	3	3	20
<b>TOTAL</b>	36	42	36	36	35	<b>185</b>

**NOTES** :

1. after tastanya kuat bgt, pahit
2. ada sedikit rasa pahit, dan mlempem
3. Visual kurang rapi
4. Bentuk diperbaiki, ada sedikit after taste pahit
5. Good
6. Warnanya bagus cuma kurang merata
7. -
8. -
9. all good
10. -





**CONSULTATION FORM  
CULINARY INNOVATION AND  
NEW PRODUCT DEVELOPMENT**

Name : Septian Rio I.  
 Student Number : 227 1130010067  
 Advisor : Chef Yohanna

No	Date	Topic Consultation	Name/Signature	Advisor Signature
1	21/1/24	Recipe		
2	21/1/24	Recipe		
3	27/1/24	Pembuatan proposal	Elma. 	
4	27/1/24	Recipe - Penambahan Fat • butter • Santan		
5	16/4/24	Recipe		
6	16/4/24	Recipe		

3. Consultation Form

No	Date	Topic Consultation	Name/Signature	Advisor Signature
7	4/9/24	BLK		
8	4/9/24	Boleh APT		
9	4/9/24	Kursi Pembelian & cost		
10.	4/9/24	Proposal	 Elma.	

#### 4. Systematic process Documentation

