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### **APPENDIX**

## 1. Approval Recipe



## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

#### APPROVAL RECIPE

Recipe Name : BEETROOT PESTO

TITLE OF C&D : BEETROOT UTILIZATION IN PESTO INNOVATION

TO INCREASE ITS FIBER CONTENT

Yield : 4 portion

Main Ingredients : 300 g Beetroot

Ingredients

- 300 g Beetroot
- 8 ml Lemon juice
- 50 g Roasted walnut
- 1,5 g Oregano
- 120 ml Milk
- 2 g Garlic powder
- 70 g Onion
- 1 g Black pepper
- 9 g Garlic
- 5 g Chicken powder

- 100 ml Water
 - 3 g Salt
 - 30 g Grated parmesan
 - 45 g Olive oil

#### Method

- 1. Preheat oven to 200°C (400°F).
- 2. Wash and peel the beetroot, then cut it into smaller chunks.
- Place the beetroot chunks on a baking sheet, drizzle with a little olive oil. Roast for about 25 minutes, or until the beetroot is fork-tender and slightly caramelized.
- 4. While waiting for the beetroot in the oven, finely chop the onion and garlic.
- 5. Once the roasted beetroot done, remove from the oven and let it cool for a few minutes. In a blender or food processor, combine the roasted beetroot, milk, and walnuts. Blend until smooth and creamy.
- 6. In a large pan over medium heat, sauté the onion and garlic in olive oil. Then, add the beetroot sauce. If the sauce is too thick, add a bit of water to loosen it. Taste and adjust the seasoning with oregano, chicken powder, salt, black



#### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

pepper, parmesan, and lemon juice as needed. Continue to stir until everything is heated through and well combined.

#### **Product Description**

Beetroot, known for its vibrant colour and earthy flavour, has become a popular ingredient in various culinary applications due to its nutritional benefits and versatility. When roasted, beetroot's natural sweetness is enhanced, and its earthy aftertaste is softened, making it an excellent base for creating flavourful pesto.

The Beetroot Pesto harnesses the power of roasted beetroot to create a creamy, velvety sauce that is both rich and well-balanced. The roasting process brings out the beetroot's natural sweetness while reducing its earthy undertones, resulting in a smoother, more refined flavour. The Beetroot Pesto provides a nutritious, flavourful alternative that pairs beautifully with a variety of pasta dishes, offering a unique yet familiar taste that elevates any meal.

#### TRIAL PROGRESS

In the first phase of testing, the steaming method was applied, which resulted in a complex flavour. However, the beetroot still retained a distinct earthy aftertaste that lingered after consumption. Although the dish had a good overall flavour, the earthy notes from the beetroot were more dominant. For the second phase, the beetroot was roasted in the oven. This method greatly improved the overall flavour profile. Roasting brought out the natural sweetness of the beetroot, while significantly reducing the earthy aftertaste. The flavour became more balanced and enjoyable, offering a deeper and richer taste. The roasted beetroot elevated the dish, providing a more refined and pleasant outcome compared to the steaming method used in the first phase. This comparison highlights that roasting the beetroot results in a more favourable flavour and texture.



# CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

## TRIAL DOCUMENTATION







Student Name

: Medalie Ersella Ryanto Putri

NIM

: 2374130010040

Advisor	1 <sup>st</sup> Examiner	2 <sup>nd</sup> Examiner	
fladhm <sup>i</sup> l	32		
Name: Heni Adhianata, S.TP., M.Sc Date: 21st March 2025	Name: Elma Sulistiya, S.TP., M.Sc Date: 21st March 2025	Name: Chef Ryan Yeremia Iskandar, S.S. Date: 21st March 2025	

# 2. Sensory Test



# CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE : 15 April 2025

NAME : Medalie Ersella Ryanto Putri

NIM : 2374130010040

PRODUCT : EXPLORING BEETROOT AS THE MAIN INGREDIENT IN PASTA

SAUCE

ADVISOR : Heni Adhianata, S.TP., M.Sc

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	4	4	4	3	4	19
Panelist 2	3	3	4	4	4	18
Panelist 3	4	4	4	4	4	20
Panelist 4	5	5	5	5	5	25
Panelist 5	4	5	4	4	4	21
Panelist 6	2	4	3	4	4	17
Panelist 7	3	4	4	4	4	19
Panelist 8	4	4	4	2	3	17
Panelist 9	4	3	4	4	4	19
Panelist 10	4	4	4	2	3	17
TOTAL	37	40	40	36	39	192

#### NOTES

- 1. Pastikan taste earthy nya balance dan tidak overpower
- 2. Good thing you changed the name to pesto! It taste better but a bit too sw
- 3. Tidak ada
- 4. sudah baik,
- 5. better kalau ditambahin sedikit lagi kejunya
- 6. improved
- 7. Enak, bau beetroot kalau bisa lebih dihilangkan
- 8. Taste a bit bland, last time was more savory even though it's salty
- 9. A bit too bland
- 10. sudah okay

# 3. Consultation Form



CONSULTATION FORM	
CULINARY INNOVATION AN	D
NEW PRODUCT DEVELOPME	NT

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
l.	27 Feb 2025	Kouseb Beseb	Honi Medalie	-> Makay
2.	19/3	Han tral ]	Heur/ MONLY	Malky
3	20/3 2015	Aeribalikan Metade "/ Irral Ì	Hens/	Markey
ч.	2/5 2025	Chapter I, II, III	Heni /	Malky
5.	19/5	Product Final	Age .	Malaj
6	10/L 2025.	Revioi, Chapter ij t iv	May	Rasky

Name	. Medalie Ersella Ryanto Putri
Student Number	. 2374130010040
Advisor	. Heni Adhianata, S. TP., M. Sc

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
7.	23 Juni 2015	Revisi Bob 1,23	Chef Jerry	Middle
8.	25 Juni 2025	Revisi Bab 1,23	3W Elma	Marget.
9.	2/7	Revisi chapter iv,	any	A College
10	25/8	Revisi unan akliir	gravj	MON
			-	

# 4. Systematic Process Documentation

1) Dice the peeled beetroot and roast it in the oven.



2) Blend roasted beetroot with walnuts.



3) Add milk to smooth the texture.



4) Saute the ingredients that have been blended with seasoning.



5) Final Product.

