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APPENDIX

1. Approved Recipe

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

APPROVAL RECIPE

Recipe Name	: Vegetarian *Sosreng*
TITLE OF C&D	: UTILIZATION OF OYSTER MUSHROOMS AS THE MAIN INGREDIENT IN DEVELOPING VEGETARIAN FRIED SAUSAGE SNACK (*SOSRENG*)
Yield	: 1 kg
Main Ingredients	: 250 g Oyster Mushroom

Ingredients for Vegetarian Sausage Dough:

- 250 g oyster mushrooms
- 150 g tempeh
- 100 g eggs
- 35 g garlic
- 60 g onions
- 140 g tapioca flour
- 70 g cornstarch flour
- 80 g isolated soy protein (ISP)
- 120 g cold water
- 50 g cooking oil
- 5 g mushroom powder
- 3 g salt
- 1 g white pepper
- 1 g paprika powder
- 1 g onion powder
- 0.5 g oregano leaves
- 0.5 g nutmeg powder

Ingredients for *Sosreng* Seasoning:

- 25 g garlic
- 10 g kaffir lime leaves
- 7 g chili powder
- 28 g chili oil
- 50 g cooking oil
- 4 g mushroom powder

Method:

1. First, prepare and weigh all the ingredients according to the specified measurements.
2. Clean the oyster mushrooms under running water.
3. Next, steam the oyster mushrooms and tempeh for 30 minutes to remove the unpleasant odors.
4. Peel and mince the garlic and onions. Heat 15 ml of oil in a pan and sauté the minced garlic and onions until they are fragrant and golden brown.
5. Once all the ingredients (oyster mushrooms, tempeh, garlic and onions oil) have cooled to room temperature (this will help ensure a better emulsification when blended), transfer all the ingredients into a food processor and blend until smooth. Gradually add 50 g of oil and 120 g of cold water until the mixture reaches a puree consistency.
6. Then, add all the seasonings (salt, white pepper, paprika powder, mushroom powder, onion powder, nutmeg powder, and oregano) along with the sautéed garlic and onions into the food processor. Also, add 2 whole eggs and blend until everything is well combined.
7. Once the mixture is smooth and thoroughly blended, transfer it to a bowl.
8. In a separate bowl, mix the tapioca flour, cornstarch, and ISP, stirring until well combined.
9. Add the flour mixture to the dough and mix until evenly combined, resulting in a solid mass.
10. After the dough is prepared, cover it with plastic wrap and let it rest in the refrigerator for 7-8 hours. This will allow the dough to stabilize and develop texture.
11. Next up, place the mixture into a piping bag and use it to fill the sausage casing. Tie the sausage casing into several segments, ensuring all sausages are of equal length. Do not forget to prick each part of the sausage with a needle to prevent it from bursting during steaming.
12. Place the sausages in a steamer and steam for 40 minutes using low heat.

13. After steaming, soak the sausages in cold water to make the casing easier to peel. Once you have removed the sausage casings, slice the sausages into thin pieces.
14. Next, deep fry the sausage pieces in hot oil until they are golden and crispy. After frying, drain them on paper towels and set aside.
15. Prepare chopped garlic and chiffonade kaffir lime leaves. Heat 50 grams of oil in a pan, then sauté the garlic, lime leaves, chili oil, chili powder, and mushroom powder until they are cooked and fragrant.
16. Finally, add the *sosreng* (fried sausage pieces) to the pan and stir until they are fully coated with the seasonings.

Product Description

Vegetarian *sosreng* is a plant-based snack innovation developed as a healthier alternative to the popular fried sausage snacks. This product is made from plant-based ingredients, making it suitable for both vegetarians and consumers seeking to adopt a healthier diet without sacrificing taste. Made primarily from oyster mushrooms, it also incorporates tempeh, which are among the highest sources of plant-based protein available. With an appearance similar to conventional *sosreng*, the vegetarian version delivers a savory flavor, crispy texture, and appetizing aroma. The main objective of this product is to provide a healthier, yet delicious snacking option, serving as an alternative for communities that are becoming increasingly aware of the importance of healthy food intake. This snack is also designed in response to the abundance of snacks in the Indonesian market that are high in calories, sodium, and saturated fats, yet low in essential nutrients. The key advantage of vegetarian *sosreng* lies in its nutritional profile as well as being gluten-free, as it is rich in plant-based protein and dietary fiber. Unlike conventional *sosreng*, which typically relies on processed meat sausages categorized as ultra-processed foods and considered less healthy, this product is made entirely from plant-based ingredients that are more natural and nutritious. Moreover, it is intended to support the growing trend of plant-based and

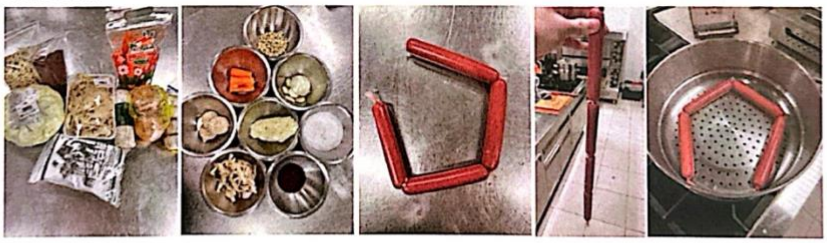
environmentally friendly lifestyles by utilizing ingredients that are more sustainable compared to animal-based products.

TRIAL PROGRESS (50 – 100 WORDS)

In the first trial, the product did not meet the desired standards. This was due to the fact that the plant-based sausage produced did not achieve the typical sensory texture of conventional sausages, as it lacked chewiness, firmness, and compactness. In addition, the produced sausages were unable to undergo the frying process properly because they were fragile and tended to stick to the pan. Consequently, multiple trials were conducted, yet failures often occurred, leading to the decision to add two ingredients: isolated soy protein (ISP) and eggs. These two ingredients proved highly beneficial in forming the desired texture quality of the plant-based sausage. As a result, the product could then be processed as a vegetarian *sosreng* that withstands the frying stage successfully, producing a crispy and pleasant texture suitable for consumption as a snack.

TRIAL DOCUMENTATION

First Trial



Second Trial

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

Last Trial

Student Name : Joel Daniel Pikarsa

NIM : 2374130010036

Advisor	1st Examiner	2nd Examiner
Name: Filias Kusuma, S.E., M.M Date: 15/09/2025	Name: Elma Sulistiya, S.TP., M.Sc Date: 12/09/2025	Name: Novi Indah Permata Sari, S.T., M.Sc Date: 12/9/25

2. Approved Sensory

AKADEMI KULINER & PATISERI OTTIMMO® INTERNASIONAL

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE : 09 July 2025

NAME : Joel Daniel Pikarsa

NIM : 2374130010036

PRODUCT : UTILIZATION OF OYSTER MUSHROOM AS THE MAIN INGREDIENT IN DEVELOPING VEGETARIAN FRIED SAUSAGE SNACK (SOSRENG)

ADVISOR : Arya Putra Sundjaja, S.E.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	3	4	3	4	4	18
Panelist 2	3	4	5	4	4	20
Panelist 3	4	4	3	4	4	19
Panelist 4	4	4	4	4	4	20
Panelist 5	4	4	4	4	4	20
Panelist 6	5	5	3	4	4	21
Panelist 7	4	4	4	4	4	20
Panelist 8	5	4	3	4	4	20
Panelist 9	4	4	4	3	4	19
Panelist 10	3	5	3	5	4	20
TOTAL	39	42	36	40	40	**197**

NOTES :

1. –
2. Oke enak
3. Texture tidak merata setiap potongan ada yg keras semua ada yg pinggir keras tengah empuk. Rasa sosisnya kurang ada taste. Berminyak sehingga saat makan terlalu banyak eneg.
4. A bit too salty, but good
5. –
6. –
7. all good
8. ukuran terlalu tebaal
9. sudah cukup baik, agak asin dikit
10. Akan lebih baik jika tekstur crunchy seperti basreng

CULINARY INNOVATION APPROVED PRODUCT DEVELOPMENT

3. Consultation Form

Akademi Kuliner & Patiseri

OTTIMMO INTERNASIONAL

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

CONSULTATION FORM

Name : Joel Daniel Pinaria

Student Number : 237413009036

Advisor : Chef. Arya Putra Sudjana, S.E.

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
1.	21/3 2025	Hasil trial I, perbaikan tekstur dan Recipe	Heni /	
2	21/3 2025	Konsultasi pembuatan Produk sosis vegan	Elma	
3	21/3 2025	Food testing, Approval product		
4.	09/07 2025	Fix recipe, Konsultasi Proposal & title CND	Elma.	
5.	09/07 2025	Konsultasi proposal		
6.	28/05 2025	Product testing	Elma	
7.	28/05 2025	Product testing		
8.	28/05 2025	Product testing		
9.	25/08 2025	Fixed proposal		
10.	22/08 2025	Update Approval recipe & product		
11.	11/9 2025	Produk & Resep		
12.	30/9 2025	konsultasi hasil uji		

4. Systematic Process Documentation

1) Steam the oyster mushrooms and tempeh

2) After blending, mix all the dry ingredients

3) Rest the dough in the refrigerator

4) Place the dough into a piping bag, to fill the sausage casing

5) Steam the sausages using low heat

6) After steaming, soak the sausages in cold water

7) Remove the sausage casings

8) Slice the sausages into thin pieces

9) Deep-fry the sausage pieces until golden crispy

10) Saute the *sosreng* seasoning

11) Finally, mix the *sosreng* with the seasonings