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## **APPENDIX**

# 1. Approved Recipe



## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

#### APPROVAL RECIPE

Recipe Name

: TOFU NOODLE

TITLE OF C&D

: UTILIZATION OF SILKEN TOFU AS A HIGH-

PROTEIN SOURCE FOR MAKING CUP NOODLE

Rev

Yield

: 4 portions

Main Ingredients

: 180 g Firm Silken Tofu

Ingredients

Noodle

- 150 g Firm Silken Tofu

- 8 g Canola Oil

- 100 g Vital Wheat Gluten

- 8 g Water

- 180 g High-protein Flour

- 2 g Salt

### Method

- 1. Blend firm silken tofu with a food processor until smooth
- To a bowl, add firm silken tofu, vital wheat gluten, high-protein flour, canola oil, water, and salt
- Mix with a fork to form a shaggy dough, then use your hands to bring it together into a ball
- 4. Knead the dough on an unfloored surface for 5-7 minutes
- 5. Cover the dough and let it rest for 15-20 minutes
- Dust a flat surface with flour, slice the dough into four pieces, flatten one into an oval disk.
- 7. Run the dough through a noodle maker.
- Dust the dough with flour, run the dough through a pasta cutter attachment, Repeat with remaining dough.



# CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

#### Ingredients

Sauce

- 20 g Canola Oil - 5 g Dried Orange Peel

- 3 g Star Anise - 2 g Dried Ginger

- 7 g Sichuan Peppercorn - 7 g Dried Red Chili Peppers

- 3 g Fennel Seeds - 12 g Garlic (smashed)

- 2 g Black Cardamom - 7 g Ginger

- 1 Cinnamon Stick - 7 g Green Onion

- 2 g Whole Nutmeg

- 5 g Pixian Broad Bean Paste

5 g Mala Hotpot Base Sauce

- 2 g Sugar

### Method

- Heat the oil on low heat, add star anise, Sichuan peppercorn, fennel seeds, black cardamom, cinnamon stick, whole nutmeg, bay leaves, dried orange peel, dried ginger, dried red chilli peppers, let them infuse for 20 minutes until the spices turns brown
- 2. Turn off the heat, use a spoon to scoop out all of the spices
- Turn the heat back on low to medium heat, add pixian broad bean paste, mala hotpot base sauce, garlics, shallots, green onions, cook until the oil turns red
- 4. Add sugar



# CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

### **Product Description**

A high-protein noodle made out of firm silken tofu, vital wheat gluten, and high-protein flour. Unlike typical noodles made from wheat flour, which usually contain around 8 grams of protein per serving, the incorporation of firm silken tofu and vital wheat gluten results in noodles with a significantly higher protein content, providing 26.6 grams of protein per serving—an increase of 232.5%.

#### Trial Progress

In the first trial, the product did not meet the desired standard of ordinary instant noodle. When fried, the noodles puffed up enormously, an could not be shaped into the paper cup. The issue resulted from the excessive gluten that are out of the use of vital wheat gluten. In the following trial, 50% of the vital wheat gluten was replaced by high-protein flour.



# CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

### TRIAL DOCUMENTATION



Student Name : Dhanakara Alayka NIM : 2374130010050

Advisor	1st Examiner	2 <sup>nd</sup> Examiner		
gladkinj?	"Noops	/for		
Name: Heni Adhianata Date: 2/5/2025	Name: Novi Indah P. Date: 3/5 (2025	Name: Gilbert Yanuar H. Date: 1/5/2025		

# 2. Approved Sensory



### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE : 02-May-25

NAME : Dhanakara Alayka NIM : 2374130010050

PRODUCT: UTILIZATION OF SILKEN TOFU AS A HIGH-PROTEIN SOURCE FOR

MAKING CUP NOODLE

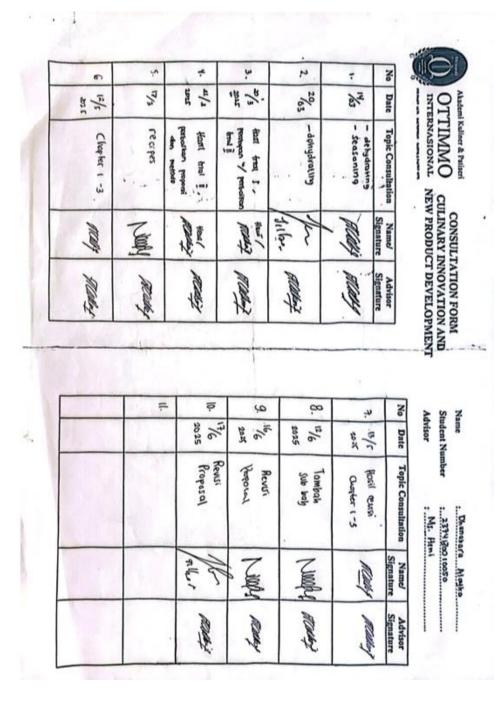
ADVISOR : Heni Adhianata, S.TP., M.Sc

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	4	4	4	4	4	20
Panelist 2	5	3	5	5	4	22
Panelist 3	5	4	5	4	4	22
Panelist 4	4	3	3	3	3	16
Panelist 5	4	4	3	4	4	19
Panelist 6	4	4	5	4	4	21
Panelist 7	4	4	4	4	4	20
Panelist 8	4	4	4	3	4	19
Panelist 9	4	4	4	4	4	20
Panelist 10	4	4	4	4	4	20
TOTAL	42	38	41	39	39	199

#### NOTES

- Teksturnya sudah serupa mie pada umumnya
   Tekstur sudah lebih baik tetapi mash ada bau tahu
- 3. The texture is chewy enough.
- 4. Texturenya bs lbh kenyal lagi
- 5. masi sticky
- 6. Very good overall. Taste better when eaten with chili oil
- 7. Tekstur sudah membaik.
- 8. Better texture, extremely salty
- 9. Ok
- 10. its ok

### 3. Consultation Form



- 4. Systematic Process Documentation
  - 1) Blend firm silken tofu with a food processor until smooth.



2) To a bowl, add firm silken tofu, vital wheat gluten, high-protein flour, canola oil, water, and salt.



3) Knead the dough on an unfloored surface for 5-7 minutes, let it rest for 15-20 minutes.



4) Run the dough through a noodle maker.



5) Infuse oil with spices for 30 minutes



6) Add Pixian broad bean paste, and mala hotpot base sauce

