

BIBLIOGRAPHY

- Al Bulushi, I. M., Guizani, N., Ayyash, M., Al Za'abi, M., Abushelaibi, A., Deeth, H. C., Al Kharousi, Z., Al Hamaandi, F., Al Maskari, S., & Alkalbani, J. (2020). Bacterial diversity, biogenic amines and lipids oxidation in traditional dried anchovy (*Encrasicholina punctifer*) during ambient storage. *International Journal of Food Studies*, 9(1), 238–250.
- Fukushima, D. (2001). Recent progress in research and technology on soybeans. *Food Science and Technology Research*, 7(1), 8-16.
- Iznilillah, W., Jumiono, A., & Fanani, M. Z. (2024). Perbandingan Pengemasan Produk Pangan Olahan Semi Basah. *Jurnal Ilmiah Pangan Halal*, 6(1), 50–56.
- Jukanti AK, Gaur PM, Gowda CLL, Chibbar RN. Nutritional quality and health benefits of chickpea (*Cicer arietinum* L.): a review. *British Journal of Nutrition*. 2012;108(S1):S11-S26. doi:10.1017/S0007114512000797
- Kaliky, N. Improving the Quality of Smooth Anchovy Nugget (*Stolephorus* sp) with the Addition of Sajiku Flour. *Jurnal Perikanan dan Kelautan*, 28(1), 51-55.
- Karimah, N., Rosidin, O., & Devi, A. A. K. (2022). Teknik Pengolahan Makanan Dalam Leksikon Bahasa Indonesia Dan Bahasa Inggris. *Literasi: Jurnal Bahasa dan Sastra Indonesia serta Pembelajarannya*, 6(2), 191-198.
- Lee, Kwang-Geun, and Takayuki Shibamoto. "Antioxidant properties of aroma compounds isolated from soybeans and mung beans." *Journal of Agricultural and Food Chemistry* 48.9 (2000): 4290-4293.
- Rachwa-Rosiak, D., Nebesny, E., & Budryn, G. (2015). Chickpeas—Composition, Nutritional Value, Health Benefits, Application to Bread and Snacks: A Review. *Critical Reviews in Food Science and Nutrition*, 55(8), 1137–1145. <https://doi.org/10.1080/10408398.2012.687418>
- Radočaj, O., Dimić, E., & Vujasinović, V. (2012). Development of a hull-less pumpkin (*Cucurbita pepo* L.) seed oil press-cake spread. *Journal of Food Science*, 77(9), C1011-C1017.
- Sampebarra, A. L., Khaerunisa, K., Ristanti, E. Y., & Asriati, D. W. (2019). Karakteristik Cokelat Spread dengan Penambahan Oleogel dari Oleogator Lemak Kakao. *Jurnal Industri Hasil Perkebunan*, 14(2), 24-32.
- Samsi, A. N., Akhmad, N. A., Marlina, S., & Rusmidin, R. (2023). Anchovy (The Engraulidae Family) and All of the Potential Aspect: A literature Review. *Jurnal Pembelajaran Dan Biologi Nukleus*, 9(1), 153-164.
- Savitri, D. A., Herlina, H., & Novijanto, N. (2021). Analisis Proksimat dan Organoleptik Dark Chocolate Spread dengan Tambahan Ingredient Berbasis Kelapa. *Jurnal Teknologi Pertanian Andalas*, 25(2), 145-152.
- Susanty, A., Yustini, P. E., & Nurlina, S. (2019). PPengaruh Metode Penggorengan dan Konsentrasi Jamur Tiram Putih (*Pleurotus streatus*) Terhadap Karakteristik Kimia dan Mikrobiologi Abon Udang (*Panaeus indicus*). *Jurnal Riset Teknologi Industri*, 13(1), 80-87.

- Sumayyah, S. S. PENGARUH KEMASAN BOTOL KACA DAN KALENG PADA SUHU PANAS TERHADAP KADAR VITAMIN C MENGGUNAKAN KROMATOGRAFI CAIR KINERJA TINGGI (KCKT) FASE TERBALIK.
- Utami, W. N., Suhartatik, N., & Mustofa, A. (2022). Yoghurt Susu Kacang Arab (*Cicer arietinum* L.) dengan Penambahan Ekstrak Buah Naga Merah (*Hylocereus polyrhizus*) dan Variasi Jenis Gula. *JITIPARI (Jurnal Ilmiah Teknologi dan Industri Pangan UNISRI)*, 7(1), 89-99.
- Wallace TC, Murray R, Zelman KM. The Nutritional Value and Health Benefits of Chickpeas and Hummus. *Nutrients*. 2016; 8(12):766. <https://doi.org/10.3390/nu8120766>
- Wijaya, N. (2021). Comparison of Accuracy Rate for Soybean Type Using Backpropagation. *Pekommas*, 6(2), 23-31.
- Yi, C., Li, Y., Zhu, H., Liu, Y., & Quan, K. (2021). Effect of *Lactobacillus plantarum* fermentation on the volatile flavors of mung beans. *LWT*, 146, 111434.

APPENDIX

1. Approved Recipe



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

APPROVAL RECIPEE

Recipe Name : SPICY ANCHOVY HUMMUS
TITLE OF C&D : UTILIZATION OF HIGH PROTEIN BEANS AND ANCHOVY FOR MAKING SAVORY SPREAD
Yield : 3-6 portion
Main Ingredients : 100gr Chickpeas
Ingredients :
- 100 gr Chickpeas, soaked - 30gr Bird eye chili
- 50 gr Soybean, soaked - 80gr Tomato
- 50 gr Peeled mung beans, soaked - 5gr Shrimp paste
- 40 gr Anchovy - 20gr Shallot
- 20 ml Olive oil - 15gr Garlic
- 15 gr Cayenne pepper - 10gt Salt
- 8gr Sugar

Method :

1. Wash and rinse thoroughly all the beans which have been soaked for 5-10 hours and then boil the beans separately for 30-40 minutes.
2. While waiting for the beans to soften, prepare the ingredients for making anchovy sauce (Cayenne pepper, bird eye chili , garlic, shallot, shrimp paste, and tomato). Wash and clean all the ingredients from dirt, then pan fry all the ingredients together.
3. Soak the anchovies in hot water for 5 minutes and then drain the water , pet dry afterwards. Pan fry the anchovies until golden brown and crispy.
4. Blend the chili sauce ingredients and anchovies together until evenly mixed and smooth. Strain the spicy anchovy sauce to produce a smoother texture.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

5. Blend the pureed beans immediately until smooth, after that add salt, sugar, olive oil and spicy anchovy sauce. Blend everything together until evenly mixed.

Product Description

Spicy anchovy hummus is a hummus variant that combines typical Middle Eastern and Indonesian flavors. This product is made from chickpeas, soybeans, peeled mung beans, spicy anchovy sauce, and olive oil. The aim of spicy anchovy hummus is to provide an interesting variation for Indonesians who like spicy and savory food. This product is designed to fulfill consumers desire for delicious and healthy dishes, while providing a unique and satisfying taste experience. This product combines the smoothness of hummus with the spicy and savory taste of spicy anchovies and creates a unique and appetizing flavor profile. This product also offers a new variation for anchovy chili sauce lovers who want to try something different and refreshing. Spicy anchovy hummus contains beans and anchovies which are rich in protein, fiber and nutrients, thereby providing good health benefits for consumers.

TRIAL PROGRESS (50 – 100 WORDS)

On the first day of the spicy anchovy hummus trial, you must ensure that the ingredients you have are complete and suitable for consumption. The first thing that must be done in making spicy anchovy hummus is to soften the nuts by boiling them for 30-40 minutes. Before the trial, the nuts must have been soaked for approximately 5-10 hours. Next, make spicy anchovy chili sauce, pan fry the chili ingredients, namely cayenne pepper, red pepper, garlic, shallot, shrimp paste, and tomato. Pan fry the anchovies until golden brown and crispy. Blend the anchovy sauce until smooth, before mixing it with the nuts, strain the anchovy sauce first to produce a smoother texture, then add olive oil, salt and sugar to give it a delicious taste.






CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

In this first trial the results were quite good, the taste was delicious but the texture is still not smooth. In the future, more trial needs to be done to produce a quality product.

TRIAL DOCUMENTATION



Student Name : Aurelia Audrey Rusly
NIM : 2274130010061

Advisor	1 st Examiner	2 nd Examiner
 Name: Yohanna Prasetio, A.Md. Par., S.Sn. Date: 28 Maret 2024	 Name: Heni Adhianata, S.TP., M.Sc. Date: 28 Maret 2024	 Name: Jessica Hartan, A.Md. Par. Date: 28 Maret 2024

2. Approved Sensory



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**CULINARY INNOVATION AND NEW
 PRODUCT DEVELOPMENT
 SENSORY TEST**

DATE : 22 April 2024

NAME : Aurelia Audrey Rusly

NIM : 2274130010061

PRODUCT : UTILIZATION OF HIGH PROTEIN BEANS AND ANCHOVY FOR MAKING SAVORY SPREAD

ADVISOR : Yohanna Prasetyo, A.Md. Par.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	4	4	4	4	3	19
Panelist 2	4	3	3	3	4	17
Panelist 3	4	5	4	4	4	21
Panelist 4	4	4	4	4	4	20
Panelist 5	5	5	5	5	5	25
Panelist 6	5	5	4	5	5	24
Panelist 7	4	4	4	4	4	20
Panelist 8	4	4	4	5	4	21
Panelist 9	4	4	4	4	4	20
Panelist 10	4	5	4	4	4	21
TOTAL	42	43	40	42	41	208

NOTES :

1. Everything is good
2. A bit too spicy, too much terasi
3. Good product
4. All good, lumayan pedes
5. all good, hanya saja pendampingnya tidak cocok, mungkin lebih cocok dengan tahu atau tempe goreng
6. enak enak
7. Sudah enak
8. Well done
9. -
10. good






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CONSULTATION FORM
 CULINARY INNOVATION AND
 NEW PRODUCT DEVELOPMENT

3. Consultation Form

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
1.	07/03/2024	Ingredient Selection	 Yohanna	 Yohanna
2.	13/03/2024	Product Consultation	 Yohanna	 Yohanna
3.	18/03/2024	Product Consultation (Hummus Sambal Teri.)	 Yohanna	 Yohanna
4.	18/03/2024	Product Consultation	 Yohanna	 Yohanna
5.	20/03/2024	Title	 Yohanna	 Yohanna
6.	25/03/2024	Product Consultation	 Yohanna	 Yohanna

Name : Andika Andrey Puly
 Student Number : 2234130010061
 Advisor : Yohanna Partito

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
7	27/3/2024	Revison Jajal, Keunggulan Merek, Metode Rekrutmen	 Andika Andrey Puly	 Andika Andrey Puly
8	3/4/24	Revisi Gula	 Andika Andrey Puly	 Andika Andrey Puly
9	9/4/24	Revisi Gula	 Andika Andrey Puly	 Andika Andrey Puly
10	23/04/2024	Revisi Consultation	 Andika Andrey Puly	 Andika Andrey Puly
11	23/09/2024	Revisi	 Andika Andrey Puly	 Andika Andrey Puly
12	23/09/2024	Revisi	 Andika Andrey Puly	 Andika Andrey Puly

4. Systematic Process Documentation

1. Soak beans for 5-10 hours.



2. Boil the beans for 30-40 minutes.



3. Ingredients for anchovy chili sauce.



4. Fry the anchovy until slightly browned.



5. Cook the chili ingredients until cooked.



6. Blend the anchovies and chili sauce ingredients until evenly smooth.



7. Blend the beans until evenly smooth and add olive oil.



8. Strain the anchovy chili sauce until it becomes smooth and discard the dregs.



9. Lastly, mix the anchovy chili sauce into the ground beans.

