

## BIBLIOGRAPHY

- Andriani, A., & Isnaini, M. (2013). Morfologi dan fase pertumbuhan sorgum. *Sorgum Inovasi Teknologi Dan Pengembangan*. <https://repository.pertanian.go.id/server/api/core/bitstreams/05de98e7-34f0-4bd3-af11-6fff4055e160/content#page=60>
- Bastomi, A. (2022). Kalori Susu Putih Semua Merk : Ultra Milk, Frisian Flag, Indomilk dan Diamond. *enutrisi.com*. <https://enutrisi.com/kalori-susu-putih-semua-merk-ultra-milk-frisian-flag-indomilk-dan-diamond/>
- FatSecret. (n.d.). *Kalori dalam Wortel (100 gram) dan Fakta Gizi*. <https://www.fatsecret.co.id/kalori-gizi/umum/wortel?portionid=59051&portionamount=100,000>
- Hanifawat, T., Suryantin, A., & Mulyo, J. (2017). PENGARUH ATRIBUT KEMASAN MAKANAN DAN KARAKTERISTIK KONSUMEN TERHADAP PEMBELIAN. *Jurnal Sosial Ekonomi Dan Kebijakan Pertanian Ariekonomika*, 6(1). <https://doi.org/10.21107/agriekonomika.v6i1.1895>
- Indria, L., Nina, K., & Elin, S. (2023). Sangkabira. *PENGEMBANGAN POTENSI WIRUSAHA MELALUI PRODUK FROZEN FOOD DARI OLAHAN DAGING AYAM DI LINGKUNGAN KARANG PANAS KECAMATAN AMPENAN KOTA MATARAM*, 3(2). <https://doi.org/10.29303/abdimmassangkabira.v3i2.692>
- Jing, L., Yingying, G., & Xiangdong, S. (2020). Jiaozi (Chinese Dumplings) and Flour Quality Requirements—An Introduction. *CEREAL FOODS WORLD*, 65(5). <https://doi.org/10.1094/CFW-65-5-0059>
- Kim, K., & Kim, J. N. (2021). Understanding Wheat Starch Metabolism in Properties, Environmental Stress Condition, and Molecular Approaches for Value-Added Utilization. *Plants*, 10(11), 2282. <https://doi.org/10.3390/plants10112282>
- Kurniadi, M., Andriani, M., Faturohman, F., & Damayanti, E. (2013). KARAKTERISTIK FISILOGI KIMIA TEPUNG BIJI SORGHUM (*Sorghum bicolor* L.) TERFERMENTASI BAKTERI ASAM LAKTAT *Lactobacillus acidophilus*. *AGRITECH*, 33(3). <https://core.ac.uk/download/pdf/290123333.pdf>
- La, H., Setiawan, W., & Achmad, A. (2018). APLIKASI TEKNIK PENYIMPANAN MENGGUNAKAN PENGEMAS VAKUM PADA BERBAGAI JENIS BERAS. *JKPTB Jurnal Keteknik Pertanian Tropis Dan Biosistem*, 6(2). <https://jkptb.ub.ac.id/index.php/jkptb/article/view/467/405>
- NURLINDA, N. (2009). PENGARUH PENAMBAHAN VITAL WHEAT GLUTEN PADA PEMBUATAN ROTI TAWAR BERBAHAN DASAR TEPUNG PISANG KEPOK. *NURLINDA.PDF*, 65. <http://repository.unhas.ac.id/id/eprint/22997/1/NURLINDA.pdf>

- Nutrition - Scallion Calories, Protein, Vitamins.* (n.d.). Soupersage. <https://www.soupersage.com/nutrition-calories-protein/scallion>
- Parenti, O., Guerrini, L., Mompin, S. B., Toldrà, M., & Zanoni, B. (2021). The determination of bread dough readiness during kneading of wheat flour: A review of the available methods. *Journal of Food Engineering*, 309, 110692. <https://doi.org/10.1016/j.jfoodeng.2021.110692>
- Pertiwi, T. (2020). PERANCANGAN KEMASAN KUE KIPO DI UMKM BU DJITO MENGGUNAKAN METODE KREATIF. *Servients in Lumine Veritatis UAJY*. <http://e-journal.uajy.ac.id/22587/1/1506084831.pdf>
- Ramahdani, & Sumarmi. (2017). AMERTA NUTRITION. *Gambaran Penerapan Prinsip Higiene Sanitasi Makanan Di PT Aerofood Indonesia, Tangerang, Banten*. <https://doi.org/10.20473/amnt.v1.i4.2017.291-299>
- Sa'diyah, R. (2022, March 29). *Manakah yang Lebih Baik? Sorgum, Gandum, atau Beras?* - Blog Kecipir. Blog Kecipir. <https://kecipir.com/blog/tips-dan-trik/manakah-yang-lebih-baik-sorgum-gandum-atau-beras/>
- Setyanti, F. (2015). *KUALITAS MUFFIN DENGAN KOMBINASI SORGUM (Sorghum bicolor) DAN TEPUNG TERIGU* [Thesis]. Universitas Atmajaya.
- Siregar, N., Firmansyah, T., & Mariati. (2016). Pertumbuhan dan Produksi Sorgum Manis (*Sorghum bicolor* (L.) Moench) Terhadap Pemberian Mulsa dan Bahan Organik. *Jurnal Agroekoteknologi*, 4(3). <https://media.neliti.com/media/publications/108380-ID-none.pdf>
- Tripayuni, E. (2021). PENGARUH SUPLEMENTASI TEPUNG KACANG MERAH (*Phaseolus vulgaris* L) PADA MIE BASAH TERHADAP MUTU ORGANOLEPTIK DAN KANDUNGAN GIZI SEBAGAI PANGAN ALTERNATIF CEMILAN SEHAT. *Repository*. <http://repo.upertis.ac.id/1799/>
- Udang Vaname vs Udang Windu – Fakultas Saintek Universitas Ibrahimy.* (n.d.). <https://saintek-ibrahimiy.ac.id/berita/udang-vaname-vs-udang-windu/>
- Wahmuda, F., & Moch, H. (2018). MAKNA TAMPILAN VISUAL KEMASAN SEBAGAI PENERAPAN REDESAIN KEMASAN MAKANAN RINGAN DI UKM BENOK –KABUPATEN PROBOLINGGO. *ITATS Prosiding Seminar Nasional Sains Dan Teknologi Terapan, VI*.
- Wahyuningtias, D., Putranto, T., & Kusdiana, R. (2014). UJI KESUKAAN HASIL JADI KUE BROWNIES MENGGUNAKAN TEPUNG TERIGU DAN TEPUNG GANDUM UTUH. *Binus Business Review*, 5(1). <https://doi.org/10.21512/bbr.v5i1.1196>
- Wardy. (2022). Plastik vacuum emboss vs polos, mana lebih baik? *Wiratech Toko Mesin Kemasan - Mesin Makanan - Plastik Kemasan*. <https://wiratech.co.id/plastik-vacuum-emboss-vs-polos/>
- William, D., & Rinawati, R. (2020). Pemanfaatan Ikan Tuna pada Pembuatan Gyoza Tuna untuk Meningkatkan Angka Konsumsi Ikan di Masyarakat. *Prociding Pendidikan Teknik Boga Busana FT UNY*, 15(1). <https://journal.uny.ac.id/index.php/ptbb/article/view/35995>

Zahra, A., & Elida. (2023). View of Pemanfaatan Substitusi Tepung Mocaf Pada Kulit Yaki Gyoza. *Jurnal Pendidikan Tambusai*, 7(2).  
<https://www.jptam.org/index.php/jptam/article/view/6238>

## APPENDIX

### 1. Approved Recipe

Recipe Name : SORGHUM GYOZA  
TITLE OF C&D : UTILIZATION OF SORGHUM FLOUR AS GYOZA SKINS,  
SUBSTITUTING ALL PURPOSE FLOUR AS A DIETARY FIBER  
ALTERNATIVE  
Yield : 5-7 portion  
Main Ingredients : 120 gr Sorghum Flour  
Ingredients :  
- 120 gr Sorghum Flour  
- 60 gr Wheat Gluten flour  
- 105 ml Full cream milk  
- Sugar ,salt & white pepper to taste  
- 100 ml Oil  
- 1 tbsp Sesame oil  
- 1 tbsp Soy sauce  
- 200 gr peeled and chopped prawns  
- 1 ½ tbsp Chicken stock  
- 1 tsp Cornstarch  
- ½ Chopped carrot  
- 1 Chopped scallion  
- 200 ml Water  
- 2 Cloves chopped garlic

Method :

1. Mix sorghum flour, wheat gluten flour, milk, a pinch of sugar, salt, white pepper. Mix until it becomes a dough and grind it using a machine according to the desired thinness, and form it into a round shape.
2. Chopped Shrimp, add stock, carrot pieces, scallions, cornstarch, garlic, soy sauce, salt, sugar, white pepper, sesame oil. Mix the filling until the texture becomes thick and sticky.
3. To make dumplings, place a teaspoon of filling in the center of a gyoza packet. Moisten the edges with water and fold them, then press the edges and bend them slightly so that they cover the filling.
4. Heat the oil in a large non-stick frying pan over high heat. Add the gyoza and cook for about 2 minutes or until the bottoms are starting to turn golden brown. Pour in enough water to come a quarter of the way up the sides of the gyoza. Cover with a lid and steam for 4-5 minutes. Cook until everything is cooked.
5. Move the gyoza from the pan to a plate and drizzle with sesame oil and scallions.

RECIPE BACKGROUND (50 – 100 WORDS)

Gyoza is one of the foods that originates from Japan and has a unique cooking technique and delicious taste, with the basic ingredients of the skin being made from all purpose flour. Here I am trying to make gyoza skins using sorghum flour, substituting all purpose flour partially to become an alternative for diet, and also healthier option. Besides that a lot of all purpose flour is also imported from abroad so the use of sorghum flour can be an alternative to wheat flour so we don't always import it, but began to use ingredients from their own country.

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1 <sup>st</sup> Advisor	2 <sup>nd</sup> Advisor	3 <sup>rd</sup> Advisor
 Name: Iren Adhiana Date: 27/03/2023	 Name: Argo P.S. Date: 27/03/2023	 Name: Jessica H. Date: 27/03/2023

## 2. Approved Sensory

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

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

**DATE** : 5 April 2023  
**NAME** : Stefan Jonathan Sinarli  
**NIM** : 2174130010020  
**PRODUCT** : Sorgum gyoza  
**ADVISOR** : Heni Adhianata, S.T.P., M.Sc

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	TOTAL
Panelist 1	√	√	√	√	√
Panelist 2	√	√	X	X	X
Panelist 3	√	√	√	√	√
Panelist 4	√	√	√	√	√
Panelist 5	√	√	√	√	√
Panelist 6	√	√	√	√	√
Panelist 7	√	√	√	√	√
Panelist 8	√	√	√	√	√
Panelist 9	√	√	√	√	√
Panelist 10	√	√	√	X	√

**NOTES** :

- Kurang lembut kurang gurihhh
- Untuk isian gyoza rasanya enak. Tapi kulitnya masih ada yang belum matang sempurna, sedikit keras dan bertepung. Tetapi secara keseluruhan masih bisa diterima



### 3. Consultation Form



Akademi Kuliner & Pastry  
OTTIMMO  
INTERNASIONAL  
CELEBRATING ARTS, CREATIVITY, INNOVATION & EXCELLENCE

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

Name : Prof. Jonathan Suci  
 Student Number : 2174150010020  
 Advisor : Henri Adhyanata, S.T.P., M.Sc

No	Date	Topic Consultation	Name/ Signature
1	10/03/23	Product Idea Consultation	 Jessica H.
2	13/03/23	Product Development Consultation	 Jessica H.
3	15/03/23	Ingredient's consultation	 Henri A.
4	15/03/23	Product development Consultation	 Angra
5	24/03/23	Revisi product	 Angra
6	24/03/23	Revisi Product	 Jessica H.

No	Date	Topic Consultation	Name/ Signature
7	27/03/2023	Sensory Consultation	 Henri A.
8	25/04/2023	Revisi product	 Henri Adhyanata
9	1/5/2023	Proposal C=D	 Henri A.
10	12/5/23	Proposal Chapter 1-3	 Henri A.
11	11/7/23	Chapter 4	 Henri A.
12	14/7/23	Chapter 5	 Henri A.

#### 4. Systematic Process Documentation

##### 1) Based ingredients for gyoza skin (sorghum gyoza)



##### 2) Filling ingredients



3) Milk and Wheat gluten flour



4) Gyoza skin dough



5) Gyoza skin dough after grinding



6) Gyoza skin dough after being cut into a round shape



7) Blending filling ingredients



8) Pan frying the gyoza



9) Sorghum gyoza



10) Gyoza skins stored for a week



11) Fail trial



12) Fail trial



