BIBLIOGRAPHY

- Acosta, J. A., Petry, A. L., Gould, S. A., Jones, C. K., Stark, C. R., Fahrenholz, A., & Patience, J. F. (2020). Effects of grinding method and particle size of wheat grain on energy and nutrient digestibility in growing and finishing pigs. *Translational Animal Science*, 4(2), 682–693. https://doi.org/10.1093/tas/txaa062
- Ayad, A. A., Williams, L. L., El-Rab, D. a. G., Ayivi, R., Colleran, H. L., Aljaloud, S., & Ibrahim, S. A. (2020). A review of the chemical composition, nutritional and health benefits of dates for their potential use in energy nutrition bars for athletes. *Cogent Food & Agriculture*, 6(1), 1809309. https://doi.org/10.1080/23311932.2020.1809309
- Banu, I., & Aprodu, I. (2024). Assessment of the performance of oat flakes and pumpkin seed powders in Gluten-Free dough and bread based on rice flour. *Applied Sciences*, *14*(8), 3479. https://doi.org/10.3390/app14083479
- Bianchi, P. I., Aronico, N., Santacroce, G., Broglio, G., Lenti, M. V., & Di Sabatino, A. (2024). Nutritional Consequences of Celiac Disease and Gluten-Free diet. *Gastroenterology Insights*, 15(4), 878–894. https://doi.org/10.3390/gastroent15040061
- Chen, Y., Li, N., Guo, X., Huang, H., Garcia-Oliveira, P., Sun, J., Zhang, J., Prieto, M. A., Guo, Z., & Liu, C. (2023). The nutritional and bio-active constituents, functional activities, and industrial applications of cashew (Anacardium occidentale): A review. *Food Frontiers*, 4(4), 1606–1621. https://doi.org/10.1002/fft2.250
- Dogruer, I., Baser, F., Gulec, S., Tokatli, F., & Ozen, B. (2023). Formulation of Gluten-Free Cookies Utilizing Chickpea, Carob, and Hazelnut Flours through Mixture Design. *Foods*, 12(19), 3689. https://doi.org/10.3390/foods12193689
- El Khoury, M., & El Khoury, R. (2021). Antioxidant and antimicrobial activities of date (Phoenix dactylifera) seed extracts. *Journal of Food Quality*, 2021, 6611462. https://doi.org/10.1155/2021/6611462
- Jan, N., Naik, H. R., Gani, G., Bashir, O., Amin, T., Wani, S. M., & Sofi, S. A. (2022). Influence of replacement of wheat flour by rice flour on rheo-structural changes, in vitro starch digestibility and consumer acceptability of low-gluten pretzels. Food Production Processing and Nutrition, 4(1). https://doi.org/10.1186/s43014-022-00088-y
- Joan, S. S., & Luke, L. H. (2025). Development and evaluation of nutritious gluten-free cookies enriched with black rice and Kimia dates. *Journal of Current Research in Food Science*, 6(1), 55–59. https://doi.org/10.22271/foodsci.2025.v6.i1a.185

- Lonnie, M., Hooker, E., Brunstrom, J., Corfe, B., Green, M., Watson, A., Williams, E., Stevenson, E., Penson, S., & Johnstone, A. (2018). Protein for Life: Review of optimal protein intake, sustainable dietary sources and the effect on appetite in ageing adults. *Nutrients*, 10(3), 360. https://doi.org/10.3390/nu10030360
- Martínez, E., García-Martínez, R., Álvarez-Ortí, M., Rabadán, A., Pardo-Giménez, A., & Pardo, J. E. (2021). Elaboration of Gluten-Free Cookies with Defatted Seed Flours: Effects on Technological, Nutritional, and Consumer Aspects. *Foods*, *10*(6), 1213. https://doi.org/10.3390/foods10061213
- Maqsood, S., Adiamo, O., Ahmad, M., & Mudgil, P. (2019). Bioactive compounds from date fruit and seed as potential nutraceutical and functional food ingredients. *Food Chemistry*, 308, 125522. https://doi.org/10.1016/j.foodchem.2019.125522
- Najjar, Z., Kizhakkayil, J., Shakoor, H., Platat, C., Stathopoulos, C., & Ranasinghe, M. (2022). Antioxidant Potential of Cookies Formulated with Date Seed Powder. *Foods*, 11(3), 448. https://doi.org/10.3390/foods11030448
- Shahrajabian, M. H., & Sun, W. (2023). The important nutritional and wonderful health benefits of cashew (Anacardium occidentale L.). *The Natural Products Journal*, 13(4), 2–10. https://doi.org/10.2174/2210315512666220427113702
- Tanyitiku, M. N., Bessem, P., & Petcheu, I. C. N. (2024). Gluten-Free corn cookies incorporated with stinging nettle leaf flour: effect on physical properties, storage stability, and health benefits. *International Journal of Food Science*, 2024(1). https://doi.org/10.1155/2024/8864560

APPENDIX

1. Approved Recipe



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

APPROVAL RECIPE

Recipe Name

: Date Cashew Cookie Bites

TITLE OF C&D

: INNOVATION OF GLUTEN-FREE COOKIE BITES

MADE FROM DATES AND CASHEWS FOR A

HEALTHY SNACK

Yield

: I small jar

Main Ingredients

: 60 g dates & 60 g cashews

Ingredients

60 g dates

20 g sugar

- 60 g cashews

10 g egg

20 g pumpkin seeds

1/4 tsp vanilla essence

50 ml milk

¼ tsp baking soda

30 g rice flour

a pinch of salt

- 20 g corn starch

- black sesame seed

30 g melted butter

Method

- 1. Separate the dates from their seeds and skin.
- Then, heat the milk in a saucepan. Bring it to simmer, add the dates and bring to a boil until the dates soften. After that, remove from heat. Set aside the softened dates.
- 3. Next, blend 60 g of cashews and 20 g of pumpkin seeds until smooth and fine.
- Then, add the dates into the mixture and blend again until it forms a dough-like consistency.
- 5. After the dates dough is done, the next step is to make the flour dough.
- 6. First, melt the butter.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

- Mix the rice flour, corn starch, vanilla, baking soda, melted butter, eggs and a pinch of salt.
- Stir until well blended and forms the consistency of cookie dough. After both doughs are done, mix the two doughs until smooth.
- 9. Weigh the dough into 6 g portions and shape each portion into a ball.
- 10. Place the shaped dough onto a tray and flatten each piece using a fork.
- Sprinkle chopped pumpkin seeds and black sesame seeds on top of the cookie dough.
- 12. Bake in the oven at 150 degrees Celcius for 20 minutes.
- 13. Remove from the oven, let the cookies cool and store in an airtight jar.

Product Description

This product is a gluten-free cookie bites. These cookie bites are made from dates, processed with cashews and seeds such as pumpkin seeds and black sesame. These cookies are a great solution for those seeking a nutritious snack that support overall wellness. The purpose of this product is to provide a delicious, convenient, and healthy snack option without compromising on taste or nutrition. Packed with essential nutrients, it can boost energy, and provides a good sources of fiber. With no gluten, these cookies are a great choice for individuals with dietary restrictions or anyone looking for a wholesome snack. Their rich combination of natural ingredients also makes them an ideal choice for maintaining a balanced diet.

TRIAL PROGRESS

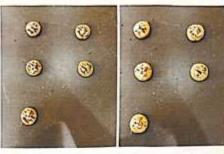
Currently, the cookies have a good taste with the perfect level of sweetness. Additionally, the cookies have a crunchy texture. However, the shelf life of the cookies and how long the texture lasts have not been tested yet. Therefore, the texture will likely be tested again to achieve a better product.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

TRIAL DOCUMENTATION





Documentation of the cookies after being flattened, topped with pumpkin seeds and black sesame seeds, and after being baked.

Student Name

: Michelle Lorens

NIM

: 2374130010007

Advisor	1" Examiner	2 nd Examiner
ku.		00
Mary	Malkos	Joseph
Name: Novi Indah Permata Sari, S.T.,	Name: Heni Adhianata,	Name: Arya Putra
M.Sc. Date: 9 /5 /2018	S.TP., M.Sc Date: 9/5/2025.	Sundjaja, S.E Date:

2. Approved Sensory



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE : 11 April 2025

NAME : Michelle Lorens NIM : 2374130010007

PRODUCT : DEVELOPMENT OF GLUTEN-FREE COOKIE BITES USING DATES

AND CASHEWS FOR CARDIOVASCULAR HEALTH

ADVISOR : Novi Indah Permata Sari, S.T., M.Sc.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	4	4	4	4	4	20
Panelist 2	4	4	3	4	4	19
Panelist 3	4	4	5	4	5	22
Panelist 4	4	4	3	3	3	17
Panelist 5	4	5	4	4	4	21
Panelist 6	4	5	4	5	4	22
Panelist 7	5	5	4	5	5	24
Panelist 8	3	3	2	3	3	14
Panelist 9	4	4	2	3	3	16
Panelist 10	5	5	5	5	5	25
TOTAL	41	43	36	40	40	200

NOTES

- :
- 1. Enak, manisnya pas, tekstur sudah oke
- 2. tekstur cenderung keras
- 3. Tidak ada
- Dry, can add a bit more sweetness. Would be nice if you can taste more texture
 of the cashew
- 5. Good tetapi kurang renyahh
- 6. Taste good
- 7. Sudah oke
- 8. Gluten free products are a lot these days, whats the specialty of your product besides the toppings?
- 9. too hard
- 10. taste cukup, tekstur renyah, menarik dilihat

3. Consultation Form

f	\$N				-	S.
Jumat. 21 Naret 2025	ESCE ELOW ELOW	Nara 2023	poos, s Mare 2025	P. opu, S Moren 2015	Marst 2025	Date
forestur coonec.	Penentian Produt COOME	Perentuan Perentuan Courses	panan produk.	Resep Hack	prosen padu	Topic Consultation
	Artice States	Harry Markey		Marie /		Name/ Signature
Pulmy.	て長	て要	乙曼	Many	て皇	Advisor Signature

8	6	60	-41	S.
Ratur 18 Juni 2025	18 Juni 2025	Pales. 18 Juns 2025	Kanis, 8 Ma 2023	Date
Ronsultate hard reus proposal.	ליטעיסטו איטאי הפווש המיסינטו	Kongultoti hosti revisi proposal	Izonautos mengensi Proposal OVD	Topic Consultation
	Times	Re		Name/ Signature
て憂	て夏	Night Miles	て芸	Advisor Signature

ì	4	
Age that I want to the party and the party a	INTERNASIONAL	OTTIMMO
	INTERNASIONAL NEW PRODUCT DEVELOPMENT	CONSULTATION FORM CULINARY INNOVATION AND

Name Mychese Lorens
Student Number 2344/2000007
Advisor ws Nov

- 4. Systematic Process Documentation
 - 1) Soaked dates in pasteurized milk



2) Strain and grind the dates



3) Grind cashews and pumpkin seeds



4) Ground cashew and pumpkin seeds



5) Mix dates and ground cashew



6) Mix dates dough with rice flour, cornstarch, eggs, melted butter, baking soda, and vanilla.



7) Weigh the dough



8) Shape the dough



9) Sprinkle with black sesame seeds



10) Bake at 150° celcius for 15-20 minutes



11) Let it cool and store in airtight jar

