BIBLIOGRAPHY

- AlGeffari MA, et al. (2021). Glycemic indices of dates "Ramadan Symbolic Food" in patients with type 2 diabetes using CGM system. Diabetes Research and Clinical Practice.
- Assaad Khalil S, et al. (2021). Glycemic indices of dates in T2DM patients using CGM system. Diabetes Research and Clinical Practice.
- Atkinson FS, et al. (2021). International tables of glycemic index and glycemic load values 2021 (systematic review)
- Choi, S. G., Kim, M. Y., & Kim, D. W. (2016). Effect of frying methods on the texture and oil uptake of gluten-free snacks. Food Chemistry, 199, 612–617. https://doi.org/10.1016/j.foodchem.2015.12.065
- Damayanti, D., & Haryono, R. (2021). Karakteristik tepung mocaf dan potensinya dalam produk bebas gluten. Agroindustri, 9(1), 45–51.
- Elleuch M, et al. (2020). Valorization of Date Fruit (Phoenix dactylifera L.) as a Potential Functional Food and Ingredient: Characterization of Fiber, Oligosaccharides, and Antioxidant Polyphenols. Nutrients.
- Goyal, M., Nagpal, M., & Singh, R. (2020). Functional and therapeutic potential of dates: A review. Journal of Pharmacognosy and Phytochemistry, 9(5),10811085. https://www.phytojournal.com/archives/2020/vol9issue5/PartR/9-5-180-930.pdf
- Han, J. H. (2014). "A review of food packaging technologies and innovations." In Innovations in Food Packaging (2nd pages. 3–12). Academic Press.
- lsalim, W., Al-Alawi, R. A., & Al-Kaabi, M. (2020). Nutritional value and health benefits of dates: A review. International Journal of Food Science and Nutrition, 5(6), 131–139.
- Kaur, N., & Kaur, P. (2021). Nutritional and functional properties of banana fruit:

 A review. Journal of Food Science and Technology,

 58(1),115. https://doi.org/10.1007/s13197-020-04507-7
- Meenakshi S, et al. (2023). Effect of dates on blood glucose and other metabolic variables: A narrative review. Diabetes & Metabolic Syndrome: Clinical Research & Reviews.

- Mishra, H. N., & Khatkar, B. S. (2014). Development of date-based milk jam. International Journal of Food Science & Technology, 49(3), 728–735.
- Putri, R. A., & Santoso, U. (2016). Effects of molding techniques on the quality of gluten-free products made from cassava. International Food Research Journal, 23(2), 872–878.
- Suri, S., Passi, S. J., & Jamir, T. (2014). Banana: A functional food in the management of chronic diseases. Journal of Pharmacognosy and Phytochemistry, 3(4), 51–59.
- Suryani, N. N., & Andarwulan, N. (2016). Physicochemical characteristics and functional properties of modified cassava flour (mocaf) in Indonesia. International Food Research Journal, 23(6), 2671–2675.
- Syamsir, E., & Nurrahmi, H. (2022). Pemanfaatan tepung mocaf pada pembuatan makanan fungsional bebas gluten. Jurnal Pangan Fungsional Indonesia, 5(2), 88–94. Retrieved from http://journal.ipb.ac.id
- USDA. (2023). FoodData Central. U.S. Department of Agriculture. Retrieved from https://fdc.nal.usda.gov/
- Vayalil, P. K., et al. (2022). Phenolic compounds in date fruits and their health-promoting properties. Plants, 11(3), 412. https://doi.org/10.3390/plants11030412
- Wakrim, L., et al. (2023). Prebiotic potential of date palm fruits and their impact on human gut microbiota. Frontiers in Nutrition, 10, 1132445. https://doi.org/10.3389/fnut.2023.1132445

APPENDIX

1. Approved Recipe



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

APPROVAL RECIPE

Recipe Name : Banana Dates Stick with BaDa Jam

TITLE OF C&D : SUGAR FREE AND GLUTEN FREE BANANA DATES

STICK WITH BADA JAM AS NATURAL HEALTHY

SNACK

Yield : 50 g / Portion

Main Ingredients : 100 g Banana Cavendish

Ingredients

- 175 g mocaf flour - 150 g dates

- 50 g tapioca flour - 2 g baking soda

- 25 g butter - 40 g water

- 10 g egg - 100 g plain milk

- 100 g banana cavendish

Method

- Prepare 50 g cavendish banana, 50 g dates, 175 g mocaf flour, 50 g tapioca flour, baking soda, butter, eggs and water.
- Melt the butter, beat the eggs, mash 50 g banana until smooth and blend 50 g dates using 20 g water.
- All ingredients are ready, mix all ingredients and stir until not too smooth. Roll
 out the dough but not too thin and cut into long strips. Oven ingredients at a
 temperature of 150°-180° 8 minutes.
- 4. While waiting for the dough to cook, make the jam. Prepare the ingredients: 50 g Cavendish bananas, 100 g dates and 100 g plain milk. Then blend all the ingredients until smooth and saute until thickened.
- Everything is ready and the banana dates sticks with banana dates jam are ready to eat.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

Product Description

The Sugar-Free and Gluten Free Banana Dates Stick and Banana Dates Jam is a natural, wholesome snack product designed to meet the growing demand for healthy, plant-based, and allergen friendly food options. Made from ripe mashed Cavendish bananas and natural date paste, this snack combines the natural sweetness of fruits with the nutritional benefits of gluten-free ingredients such as modified cassava flour (mocaf) and tapioca flour.

The banana dates stick is shaped into convenient portions and baked or lightly fried for a crispy texture, while the banana dates jam serves as a naturally sweet, fiber rich spread. Both components are free from added sugars, preservatives, artificial flavors, and gluten-containing grains, making them suitable for people with dietary restrictions such as diabetes, celiac disease, or those following a clean-label diet.

This product not only offers a pleasant taste and soft texture but also provides essential nutrients such as dietary fiber, potassium, and antioxidants derived from bananas and dates. Its formulation is designed to support digestive health, provide sustainable energy, and promote overall well being making it an ideal choice for consumers seeking nutritious snacks without compromising flavor or quality.

TRIAL PROGRESS (50 - 100 WORDS)

On the first trial, this product was meant to be savory, but as time goes by, this product eventually turns into a sweet product. When making this product there were no difficulties and the taste was just right, only the flour composition had to be changed, otherwise it was okay.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

TRIAL DOCUMENTATION





Student Name

: Sharon Nataly Virginia

NIM

: 2374130010009

Advisor	1ª Examiner	2 nd Examiner		
Veral 1	3,8	#		
Name: Novi Indah Permata Sari, S.T., M.Sc Date: May 26, 2025	Name: Elma Sulistiya, S.TP., M.Sc Date: May 26, 2025	Name: Chef Jessica Hartan, A,Md. Par Dute: May 26, 2025		

2. Approved Sensory



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE

: 19 Mny 205

NAME

: Sharon Nataly Virginia

NIM

: 2374130010009

PRODUCT : SUGAR FREE AND GLUTEN FREE BANANA DATES STICK WITH

BADA JAM AS NATURAL HEALTHY SNACK

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

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	3	4	3	4	3	17
Panelist 2	4	4	4	5	5	22
Panelist 3	4	5	4	4	4	21
Panelist 4	3	4	3	4	4	18
Panelist 5	4	4	3	4	4	19
Panelist 6	4	4	4	4	4	20
Panelist 7	3	4	4	4	4	19
Panelist 8	2	2	2	2	2	10
Panelist 9	4	4	4	4	4	20
Panelist 10	4	4	3	4	4	19
TOTAL	35	39	34	39	38	185

NOTES

 teksture stick bisa dibuat lebih renyah
 Sudah baik, kalau stick saja msh ada rasa tepung, tp setelah d cocol jam semakin enak

3. Enak sudah oke banget

4. Ok

5. The stick is a bit chalky

6. Texture if can be made dryer and more crisper then it's better

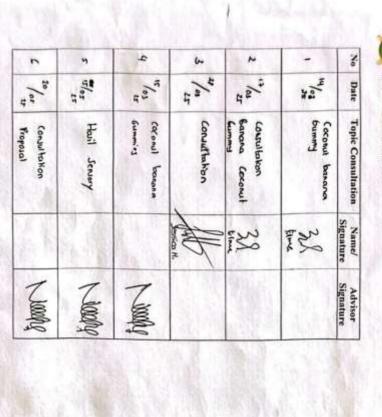
7. Sudah Oke

8. Floury

9. Good

10. Sudah okay.

3. Consultation



1	77.085	10	۵	∞	+	No
		52	11/7	4 2	34%	Date
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				223	HOUSE	Name/ Signature
		Him	て			Advisor Signature

Name

Advisor

Sharon Natoly Virginia

Student Number : 257 41500 10009 : Movi Indoh Permota Sour, ST., M. Sc

- 5. Systematic Process Documentation
- Make Banana Dates Stick
- 1). Ingredients of Banana Dates Stick with BaDa Jam.



2). Mashed the banana.



3). Blend the dates with water.



4). Mix mocaf flour, tapioca flour, mashed banana, and blended dates.



5). Mix melted butter, eeg, and water.



6). Mix all until everything is mixed well.



7). Long roll using a pasta roller.



8). Until look like this.



9). Cut into long pieces like this using pasta roll.



10). Baked 8 minutes at temperature of 150 $^{\circ}\mathrm{C}.$



11). Result.



- Make a banana dates (BaDa) jam

1). Blend banana and dates with milk.



2). Cooked the blended banana and dates.



3). Result.

