

## DAFTAR PUSTAKA

- Abduh, S.B.M., Mulyani, S., Nurwidiyanto, A.R. and Widiyanti, S.H., 2024. Gelatinization Behavior, Morphological, and Chemical Properties of Flour of Cassava, Sago, and Wheat. *ASEAN Journal of Chemical Engineering*, 24(3), pp.260-275.
- Afifah, D.N., Ma'ruf, A., Putri, R.N., Santosa, A.P. and Hamad, A., 2024. Production of High Protein MOCAF (*Modified Cassava Flour*) Using Papain and Lactic Acid Bacteria. *Molekul*, 19(1), pp.152-161.
- Afrianto, S. and Wariyah, C., 2020. Karakteristik growol yang dibuat dengan variasi varietas ubi kayu (*Manihot esculenta Crantz*) dan lama fermentasi. *Agritech*, 40(3), pp.254-261.
- Aini, N., Wijonarko, G. and Sustriawan, B., 2016. Sifat fisik, kimia, dan fungsional tepung jagung yang diproses melalui fermentasi. *Agritech*, 36(2), pp.160-169.
- Akhila, P.P., Sunooj, K.V., Aaliya, B., Navaf, M., Sudheesh, C., Yadav, D.N., Khan, M.A., Mir, S.A. and George, J., 2022. Morphological, physicochemical, functional, pasting, thermal properties and digestibility of hausa potato (*Plectranthus rotundifolius*) flour and starch. *Applied Food Research*, 2(2), p.100193.
- Almohamad, M., Dave, J.M., Calloway, E.E., Li, R. and Sharma, S., 2024. Relationship between food security, nutrition security, and diabetes: The role of supplemental nutrition assistance program participation. *Current Developments in Nutrition*, 8(5), p.102153.

Ayesha, C., Rahman, N.A., Zt, Z. and Handayani, E.S., 2021. Proses Fermentasi Vinegar dan Potensinya Sebagai Obat Saluran Pencernaan. In *Prosiding Seminar Nasional Biologi* (Vol. 1, No. 2, pp. 677-684).

Ayetigbo, O., Latif, S., Abass, A. and Müller, J., 2018. Comparing characteristics of root, flour and starch of biofortified yellow-flesh and white-flesh cassava variants, and sustainability considerations: A review. *Sustainability*, 10(9), p.3089.

Azzahra, U., Julita, W. and Achyar, A., 2022. Pengaruh Lama Fermentasi Dalam Pembuatan Tape Singkong (Manihot utilissima). In *Prosiding Seminar Nasional Biologi* (Vol. 2, No. 2, pp. 508-515).

Baheti, B., Liu, X., Wang, M., Zhang, C., Dong, X., Kang, N., Li, L., Li, X., Yu, S., Hou, J. and Mao, Z., 2023. Association between Meal frequency and type 2 diabetes Mellitus in rural adults: a large-scale cross-sectional study. *Nutrients*, 15(6), p.1348.

Bamidele, O.P., 2025. Effects of Natural Fermentation Time on Chemical Composition, Antioxidant Activities, and Phenolic Profile of Cassava Root Flour. *Applied Sciences*, 15(15), p.8494.

Bayata, A., 2019. Review on nutritional value of cassava for use as a staple food. *Sci J Anal Chem*, 7(4), pp.83-91.

Borowiak, K., Wolna-Maruwka, A., Niewiadomska, A., Budka, A., Schroeter-Zakrzewska, A. and Stasik, R., 2021. The effects of various doses and types of effective microorganism applications on microbial and enzyme activity of medium and the photosynthetic activity of scarlet sage. *Agronomy*, 11(3), p.603.

- Camargo, C., Colonna, P., Buleon, A. and Richard-Molard, D., 1988. Functional properties of sour cassava (*Manihot utilissima*) starch: polvilho azedo. *Journal of the Science of Food and Agriculture*, 45(3), pp.273-289.
- Campos, V., Tappy, L., Bally, L., Sievenpiper, J.L. and Lê, K.A., 2022. Importance of carbohydrate quality: what does it mean and how to measure it?. *The Journal of nutrition*, 152(5), pp.1200-1206.
- Cempaka, L., 2021. Peuyeum: Fermented cassava from bandung, west java, Indonesia. *Journal of Ethnic Foods*, 8(1), p.3.
- da Silva Pereira, A., da Costa Fontan, R.I., Franco, M., de Souza Júnior, E.C., Veloso, C.M., Sampaio, V.S., Bonomo, P., Bonomo, R.C.F., 2018. Study of alpha-amylase obtained by solid state fermentation of cassava residue in aqueous two-phase systems. *Brazilian Journal of Chemical Engineering*, 35(3), pp.1141-1152.
- Dahal, P. and Tamang, M.K., 2021. Effects of different processing methods on anti-nutritional factors of cassava (*Manihot esculenta crantz*). *Journal of Food & Nutritional Disorders*, 10(5).
- Daud, A., Suriati, S. and Nuzulyanti, N., 2020. Kajian penerapan faktor yang mempengaruhi akurasi penentuan kadar air metode thermogravimetri. *Lutjanus*, 24(2), pp.11-16.
- Diniyah, N., Subagio, A., Sari, R.N.L., Vindy, P.G. and Rofiah, A.A., 2018. Effect of fermentation time and cassava varieties on water content and the yield of starch from modified cassava flour (MOCAF). *Indonesian Journal of Pharmaceutical Science and Technology*, 5(2), pp.71-75.

- Fitriana, N., Marwanti, Pamadhi, H., 2023. The potential of growol as healthy traditional food: a mini review. *Food Res* 7.
- Florentina, F., Syamsir, E., Hunaefi, D. and Budijanto, S., 2016. Teknik Gelatinisasi Tepung Beras untuk Menurunkan Penyerapan Minyak Selama Penggorengan Minyak Terendam. *agriTECH*, 36(4), pp.387-393.
- Frediansyah, A., 2018. Microbial Fermentation as Means of Improving. *Cassava*, p.123.
- Gänzle, M., 2022. The periodic table of fermented foods: limitations and opportunities. *Applied Microbiology and Biotechnology*, 106(8), pp.2815-2826.
- Gibson, G.R. and Roberfroid, M.B., 1995. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *The Journal of nutrition*, 125(6), pp.1401-1412.
- Golachowski, A., Drożdż, W., Golachowska, M., Kapelko-Żeberska, M. and Raszewski, B., 2020. Production and properties of starch citrates—Current research. *Foods*, 9(9), p.1311.
- Greenfield, H. and Southgate, D.A., 2003. *Food composition data: production, management, and use*. Food & Agriculture Org.
- Hasanah, I.N., 2016. *Uji aktivitas enzim selulase dan amilase pada bakteri EM-4 (effective microorganism 4)* (Doctoral dissertation, UIN Sunan Gunung Djati Bandung).

Helsius, S.B., Inayah, I., Puspaningtyas, D.E., Sari, P.M. and Kusuma, N.H., 2023.

Diversity of Traditional Fermented Foods: Sucrose and Reducing Sugar Analysis of Various Fermented-Cassava.

Holesh, J.E., Aslam, S. and Martin, A., 2023. Physiology, carbohydrates.

In *StatPearls [Internet]*. StatPearls Publishing.

Huang, L., Zhang, X., Xu, M., An, S., Li, C., Huang, C., Chai, K., Wang, S. and Liu,

Y., 2018. Dietary fibres from cassava residue: Physicochemical and enzymatic improvement, structure and physical properties. *AIP Advances*, 8(10).

Jia, R., Cui, C., Gao, L., Qin, Y., Ji, N., Dai, L., Wang, Y., Xiong, L., Shi, R. and Sun,

Q., 2023. A review of starch swelling behavior: Its mechanism, determination methods, influencing factors, and influence on food quality. *Carbohydrate Polymers*, 321, p.121260.

Kitessa, D.A., 2024. Review on effect of fermentation on physicochemical

properties, anti-nutritional factors and sensory properties of cereal-based fermented foods and beverages. *Annals of Microbiology*, 74(1), p.32.

Kresnowati, M.T., Turyanto, L., Zaenuddin, A. and Trihatmoko, K., 2019. Effects of

microbial starter composition on nutritional contents and pasting properties of fermented cassava flour. *ASEAN Journal of Chemical Engineering*, pp.12-24.

Kurniawan, L., Maryudi, M. and Astuti, E., 2024. Utilization of tofu liquid waste as

liquid organic fertilizer using the fermentation method with activator effective microorganisms 4 (EM-4): A review. *Equilibrium Journal of Chemical Engineering*, 8(1), pp.100-112.

- Liu, Y. and Eicher-Miller, H.A., 2021. Food insecurity and cardiovascular disease risk. *Current atherosclerosis reports*, 23(6), p.24.
- Mannaa, M., Han, G., Seo, Y.S. and Park, I., 2021. Evolution of food fermentation processes and the use of multi-omics in deciphering the roles of the microbiota. *Foods*, 10(11), p.2861.
- Mayer, J., Scheid, S., Widmer, F., Fließbach, A. and Oberholzer, H.R., 2010. How effective are 'Effective microorganisms®(EM)'? Results from a field study in temperate climate. *Applied soil ecology*, 46(2), pp.230-239.
- Mohidin, S.R.N.S.P., Moshawih, S., Hermansyah, A., Asmuni, M.I., Shafqat, N. and Ming, L.C., 2023. Cassava (*Manihot esculenta* Crantz): A systematic review for the pharmacological activities, traditional uses, nutritional values, and phytochemistry. *Journal of Evidence-based integrative Medicine*, 28, p.2515690X231206227.
- Moorthy, S.N., George, M. and Padmaja, G., 1993. Functional properties of the starchy flour extracted from cassava on fermentation with a mixed culture inoculum. *Journal of the Science of Food and Agriculture*, 61(4), pp.443-447.
- Nainggolan, E.A., Banout, J. and Urbanova, K., 2023. Chemical and Thermal Treatment for Drying Cassava Tubers: Optimization, Microstructure, and Dehydration Kinetics. *Life*, 13(12), p.2355.
- Navaf, M., Sunooj, K.V., Aaliya, B., Sudheesh, C. and George, J., 2020. Physico-chemical, functional, morphological, thermal properties and digestibility of Talipot palm (*Corypha umbraculifera* L.) flour and starch grown in Malabar region of South India. *Journal of Food Measurement and Characterization*, 14(3), pp.1601-1613.

- Nofia, Y., Wasita, B. and Susilawati, T.N., 2022. Elevated growol flour reduce fasting blood glucose, HOMA-IR and increase insulin level in rat model with type 2 diabetes mellitus. *Media Gizi Indonesia*, 17(2), pp.151-158.
- Nurrohima, D., Rahman, N. and Lutfiyah, F., 2024. Nutritional and Organoleptic Value in the Formula Enteral of Growol and Germinated Mung Bean Flour as an Alternative Enteral Type 2 Diabetes Mellitus. *Amerta Nutrition*, 8(3).
- Onodu, B.C., Culas, R.J. and Nwose, E.U., 2018. Facts about dietary fibre in cassava: Implication for diabetes' medical nutrition therapy. *Integrative Food, Nutrition and Metabolism*, 5(3), pp.1-5.
- Opperman, C., Majzoobi, M., Farahnaky, A., Shah, R., Van, T.T.H., Ratanpaul, V., Blanch, E.W., Brennan, C. and Eri, R., 2025. Beyond soluble and insoluble: A comprehensive framework for classifying dietary fibre's health effects. *Food Research International*, p.115843.
- Oyeyinka, S.A., Adeloje, A.A., Olaomo, O.O. and Kayitesi, E., 2020. Effect of fermentation time on physicochemical properties of starch extracted from cassava root. *Food Bioscience*, 33, p.100485.
- Pandesolang, N., Lalujan, L.E. and Oessoe, Y., 2022. Pengaruh Suhu dan Lama Pengeringan terhadap Karakteristik Kimia dan Sensoris Permen Jelly Pepaya (*Carica Papaya L.*). *Jurnal Teknologi Pertanian (Agricultural Technology Journal)*, 13(2), pp.105-111.
- Purwandari, U., Tristiana, G.R. and Hidayati, D., 2014. Gluten-free noodle made from gathotan flour: antioxidant activity and effect of consumption on blood glucose level. *International Food Research Journal*, 21(5).

- Putri, W.D., 2011. Karakteristik Bakteri Asam Laktat Amilolitik Lokal dan Peranannya Dalam Baking Behaviour Pati Kasava Asam.
- Rahayu, M., Wahyuni, S. and Sadimantara, M.S., 2020. Kajian modifikasi terhadap karakteristik fisik tepung termodifikasi anneling: kajian pustaka. *Jurnal Sains dan Teknologi Pangan*, 5(5), pp.1-7.
- Rahmatullah, R., Mirwandhono, E., Patriani, P., Ginting, N. and Siregar, G.A.W., 2020, May. The effects of fermentation time and em4 dose on nutrient content of kepok's peel as animal feed. In *Journal of Physics: Conference Series* (Vol. 1542, No. 1, p. 012030). IOP Publishing.
- Rao, J.S., Parimalavalli, R. and Jagannadham, K., 2014. Impact of Cross-Linking on Physico-Chemical and Functional Properties of Cassava Starch.". *International Journal of Advanced Research*, 2(5), pp.284-89.
- Ratnaduhita, A., Nugroho, D.F. and Wijayanti, D.A., 2023. Upaya pemanfaatan gathot (singkong terfermentasi) sebagai pakan ternak menjadi beras analog. *Jurnal Agriovet*, 5(2), pp.191-202.
- Rozi, F., Elisabeth, D.A.A., Krisdiana, R., Adri, A., Yardha, Y. and Rina, Y., 2022. Prospects of cassava development in Indonesia in supporting global food availability in future. In *Advances in Root Vegetables Research*. IntechOpen.
- Sari, P.M. and Puspaningtyas, D.E., 2019. Skor aktivitas prebiotik growol (makanan fermentasi tradisional dari singkong) terhadap *Lactobacillus* sp. dan *Escherichia coli*. *Ilmu Gizi Indonesia*, 2(2), p.101.

- Shaheen, N., Sultana, M. and Hasan, T., 2025. Understanding Nutrient Density in Foods: Profiles, Measures, and Features. *Handbook of Public Health Nutrition: International, National, and Regional Perspectives*, pp.1-27.
- Sharma, R., Garg, P., Kumar, P., Bhatia, S.K. and Kulshrestha, S., 2020. Microbial fermentation and its role in quality improvement of fermented foods. *Fermentation*, 6(4), p.106.
- Siddiqui, S.A., Erol, Z., Rugji, J., Taşçı, F., Kahraman, H.A., Toppi, V., Musa, L., Di Giacinto, G., Bahmid, N.A., Mehdizadeh, M. and Castro-Muñoz, R., 2023. An overview of fermentation in the food industry-looking back from a new perspective. *Bioresources and bioprocessing*, 10(1), p.85.
- Singh, M.K., Han, S., Ju, S., Ranbhise, J.S., Akter, S., Kim, S.S. and Kang, I., 2025. Fruit Carbohydrates and Their Impact on the Glycemic Index: A Study of Key Determinants. *Foods*, 14(4), p.646.
- Somantri, L., 2022. Pemetaan mobilitas penduduk di kawasan pinggiran Kota Bandung. *Majalah Geografi Indonesia*, 36(2), pp.95-102.
- Soorash, M., Willing, B.P. and Bourrie, B.C., 2023. Opportunities and challenges of understanding community assembly in spontaneous food fermentation. *Foods*, 12(3), p.673.
- Sugiyarto, S., Wahyudiningsih, T.S., Darmawan, E. and Hidayah, L., 2023. Morphological Characteristics and Similarity Analysis of Cassava (*Manihot esculenta* Crantz) in Wonosobo, Temanggung, and Magelang Regencies. *Jurnal Biodjati*, 8(2), pp.273-284.

Syafitri, A., Hartini, M.Y.S., Simanjuntak, W.R.L., and Yurnaliza, 2022. Effect of Incubation Time on Amylase Enzyme Activity in Cassava Tape. *International Journal of Ecophysiology*, 4(2), pp. 9-16.

Thirunathan, P., Arnz, P., Husny, J., Gianfrancesco, A. and Perdana, J., 2018. Thermogravimetric analysis for rapid assessment of moisture diffusivity in polydisperse powder and thin film matrices. *Food Chemistry*, 242, pp.519-526.

Triani, H.D., Yuniza, A., Marlida, Y., Husmaini, H., Astuti, W.D. and Yanti, G., 2025. A novel bacterial approach to cassava waste fermentation: Reducing cyanide toxicity and improving quality to ensure livestock feed safety. *Open Veterinary Journal*, 15(3), p.1358.

Vera Zambrano, M.V., Dutta, B., Mercer, D.G., MacLean, H.L. and Touchie, M.F., 2019. Assessment of moisture content measurement methods of dried food products in small-scale operations in developing countries: A review. *Trends in Food Science & Technology*, 88, pp.484-496.

Wahyurini, E. and Sugandini, D., 2021. Budidaya dan Aneka Olahan Singkong. *Lembaga Penelitian dan Pengabdian Kepada Masyarakat. Yogyakarta.*

Wang, J., Liu, Y. and Tang, D., 2021, May. Influence of freeze-thaw cycles on water content properties of silty clay in xuchang. *In IOP Conference Series: Earth and Environmental Science* (Vol. 772, No. 1, p. 012104). IOP Publishing.

Wang, N., Li, C., Miao, D., Hou, H., Dai, Y., Zhang, Y. and Wang, B., 2023. The effect of non-thermal physical modification on the structure, properties and

chemical activity of starch: A review. *International Journal of Biological Macromolecules*, 251, p.126200.

Wang, N., Li, C., Miao, D., Hou, H., Dai, Y., Zhang, Y. and Wang, B., 2023. The effect of non-thermal physical modification on the structure, properties and chemical activity of starch: A review. *International Journal of Biological Macromolecules*, 251, p.126200.

Wang, X., Zeng, X. and Li, J., 2025. Improving Freeze–Thaw Stability of High-Moisture Extruded Plant-Based Meat: A Synergistic Strategy Combining Glucose Oxidase, Phytase and Tamarind Gum. *Foods*, 14(24), p.4270.

Wariyah, C., Slamet, A. and Riyanto, R., 2024. Chemical Changes of Cassava During Processing of Growol which Made from Different Cassava Variety and Cooking Method: Perubahan Sifat Kimia Ubikayu Selama Pengolahan Growol yang Dibuat dengan Variasi Varietas Ubikayu dan Cara Penanakan. *JITIPARI (Jurnal Ilmiah Teknologi dan Industri Pangan UNISRI)*, 9(1), pp.1-9.

Wei, C., Ge, Y., Zhao, S., Liu, D., Jiliu, J., Wu, Y., Hu, X., Wei, M., Wang, Y., Wang, W. and Wang, L., 2022. Effect of fermentation time on molecular structure and physicochemical properties of corn ballast starch. *Frontiers in Nutrition*, 9, p.885662.

Widowati, S., Setyawan, N., Herawati, H., Suhirman, S., Noerwijati, K., Budiono, R., Astuti, S.D., Tjahjohutomo, R., Unadi, A. and Budiharti, U., 2025. Physicochemical and functional properties of cassava flour produced by controlled fermentation using mixed culture from various bacteria and yeast. *Journal of Agriculture and Food Research*, 19, p.101684.

Wu, W., Zhang, X., Qu, J., Xu, R., Liu, N., Zhu, C., Li, H., Liu, X., Zhong, Y. and Guo, D., 2022. The effects of fermentation of Qu on the digestibility and structure of waxy maize starch. *Frontiers in Plant Science*, 13, p.984795.

Yulianti, P.D. and Kanetro, B., 2018. Pengaruh jenis dan konsentrasi tepung growol terhadap sifat fisik, kimia dan tingkat kesukaan mie kering. In *Seminar Nasional Inovasi Produk Pangan Lokal untuk Mendukung Ketahanan Pangan Universitas Mercu Buana Yogyakarta* (pp. 152-158).

Zhang, T., Hong, S., Zhang, J.R., Liu, P.H., Li, S., Wen, Z., Xiao, J., Zhang, G., Habimana, O., Shah, N.P. and Sui, Z., 2024. The effect of lactic acid bacteria fermentation on physicochemical properties of starch from fermented proso millet flour. *Food Chemistry*, 437, p.137764.

Zhang, Y., Mei, X., Li, W., Pan, Y., Cheng, H., Chen, S., Ye, X. and Chen, J., 2024. Mechanisms of starchy foods glycemic index reduction under different means and their impacts on food sensory qualities: A review. *Food Chemistry*, p.142351.

Zhao, M., Su, X.Q., Nian, B., Chen, L.J., Zhang, D.L., Duan, S.M., Wang, L.Y., Shi, X.Y., Jiang, B., Jiang, W.W. and Lv, C.Y., 2019. Integrated meta-omics approaches to understand the microbiome of spontaneous fermentation of traditional Chinese pu-erh tea. *Msystems*, 4(6), pp.10-1128.

Zhu, F., 2015. Composition, structure, physicochemical properties, and modifications of cassava starch. *Carbohydrate polymers*, 122, pp.456-480.