

DAFTAR PUSTAKA

- Adebo, J. A., & Kesa, H. 2023. Evaluation of nutritional and functional properties of anatomical parts of two sorghum (*Sorghum bicolor*) varieties. *Heliyon*, 9(6): 1–9.
- Adzqia, F., Suwonsichon, S., & Thongngam, M. 2023. Effects of white sorghum flour levels on physicochemical and sensory characteristics of gluten-free bread. *Foods*, 12(4113): 1–17.
- Agustia, F. C., Subardjo, Y. P., Ramadhan, G. R., & Betaditya, D. 2019. Formulasi flake mohiro dari mocaf-beras hitam dengan penambahan kacang koro pedang sebagai alternatif sarapan tinggi protein dan serat. *Jurnal Aplikasi Teknologi Pangan*, 8(4): 130–136.
- Aini, N., Arsyistawa, H. S., Sustriawan, B., Prihananto, V., Astuti, S. D., Septiana, A. T., Indarto, & Suliman, N. M. 2024. Modification of the physical and chemical properties of Inpago-Protani rice flour via fermentation with Bimo-CF starter. *Indonesian Food Science and Technology Journal*, 7(2): 84–90.
- Aini, N., Wijonarko, G., & Sustriawan, B. 2016. Sifat fisik, kimia, dan fungsional tepung jagung yang diproses melalui fermentasi. *Jurnal Agritech*, 36(2): 160–169.
- Aisah, Harini, N., & Damat. 2021. Pengaruh waktu dan suhu pengeringan menggunakan pengering kabinet dalam pembuatan mocaf (*modified cassava flour*) dengan fermentasi ragi tape. *Food Technology and Halal Science Journal*, 4(2): 172–191.
- Al-abbasy, O. Y., Younus, S. A., Rshan, A. I., & Ahmad, O. A. S. 2024. Maillard reaction: formation, advantage, disadvantage and control. a review. *Food Science and Applied Biotechnology*, 7(1): 145–161.
- Alfansuri, H. R., Fatoni, R., Fathoni, A., Setiarto, R. H. B., & Damayanti, E. 2023. The effect of variation of types of microbial starters on the physical characteristics of modified cassava flour (mocaf) rich in beta-carotene. *Jurnal Teknologi Hasil Pertanian*, 16(2): 128–143.
- Alifianita, N., & Sofyan, A. 2022. Kadar air, kadar protein, dan kadar serat pangan pada cookies dengan substitusi tepung ubi jalar ungu dan tepung rebung. *Jurnal Pangan Dan Gizi*, 12(2): 37–45.
- Aljobair, M. O. 2022. Physicochemical properties and sensory attributes of cookies prepared from sorghum and millet composite flour. *Food Science and Nutrition*, 10(10): 3415–3423.

- Andayani, R. D. 2021. Uji adaptasi sorgum (*Sorghum bicolor*) berdaya hasil tinggi di wilayah Kediri. *Agrovigor: Jurnal Agroekoteknologi*, 14(1): 30–34.
- Anggraeni, M. C., Nurwantoro, & Abduh, S. B. M. 2017. Sifat fisikokimia roti yang dibuat dengan bahan dasar tepung terigu yang ditambah berbagai jenis gula. *Jurnal Aplikasi Teknologi Pangan*, 6(1): 52–56.
- Antarlina, S. S., Estiasih, T., Zubaidah, E., & Harijono. 2021. The physicochemical properties of white sorghum (*Sorghum bicolor* L.) flour in various particle sizes by soaking the seeds before and after dehulling. *Food Research*, 5(3): 129–143.
- AOAC. 2005. *Official Methods of Analysis of The Association of Official Analytical Chemists*. AOAC International, Maryland, USA.
- Ape, D. I., Nwogu, N. A., Uwakwe, E. I., & Ikedinobi, C. S. 2016. Comparative proximate analysis of maize and sorghum bought from ogbete main market of enugu state, nigeria. *Greener Journal of Agricultural Sciences*, 6(9): 272–275.
- Apostolidis, E., Kioupis, D., Kakali, G., Stoforos, N. G., & Mandala, I. 2021. Effect of starch concentration and resistant starch filler addition on the physical properties of starch hydrogels. *Journal of Food Science*, 86(12): 5340–5352.
- Apriyanto, M., Fungohoi, L., Aprilia, V., Diba, D. F., Prayitno, S. H., Nurhayati, & Sari, D. A. (2021). *Pangan berbasis fermentasi* (A. A. Kiti (ed.); 1st ed., pp. 1–88). Nuta Media, Yogyakarta.
- Apriyantono, A. D., Fardiaz, N.L. Puspitasari, Sedarnawati, & S. Bidiyanto. 1989. *Analisis Pangan*. Institut Pertanian Bogor (IPB Press), Bogor.
- Arukwe, & Chinomnso, D. 2021. Proximate composition , functional and pasting properties of wheat flour supplemented with combined processed pigeon pea flour. *International Journal of Food Science and Nutrition*, 6(4): 59–65.
- Asamoah, E. A., Le-Bail, A., Oge, A., Queveau, D., Rouaud, O., & Le-Bail, P. 2023. Impact of baking powder and leavening acids on batter and pound cake properties. *Foods*, 12(946): 1–13.
- Astuti, S. D., Andarwulan, N., Fardiaz, D., & Hari Purnomo, E. 2017. Karakteristik tepung talas varietas bentul dan satoimo hasil fermentasi terkendali dengan inokulum komersial. *Jurnal Teknologi Dan Industri Pangan*, 28(2): 180–193.
- Azizah, U., Sholahuddin, & Lucky, H. 2025. Karakteristik fisikokimia dan organoleptik flakes terbaik berdasarkan formulasi tepung sorgum (*sorghum bicolor* L.) dan tepung ubi jalar ungu (*Ipomea batatas* L.). *Ranah Research : Journal of Multidisciplinary Research and Development*, 7(4): 2488–2501.
- Azrai, M., Pabendon, M. B., Aqil, M., Suarni, Arvan, R. Y., Zainuddin, B., &

- Andayani, N. N. 2021. *Teknologi Budidaya Tanaman Sorgum Unggul Bebas Limbah*; 1st ed., pp 1-86). Cakrawala, Yogyakarta.
- Badan Standardisasi Nasional. 2015. SNI 2970:2015 Susu bubuk. *Badan Standardisasi Nasional*. www.bsn.go.id
- BPSI Tanaman Serealia. 2024. Deskripsi varietas unggul jagung, sorgum dan gandum. *Balai Pengujian Standar Instrumen Tanaman Serealia*.
- Brigita, E. 2021. *Kajian pustaka: pemanfaatan umbi-umbian sebagai bahan baku flakes* [Universitas Katholik Soegijapranata Semarang].
- Bukonja, S., Tomi'c, J., Pestori'c, M., Maravi'c, N., Despotovi'c, S., Tomi'ci'c, Z., Kiproviski, B., & Panteli'c, N. Đ. 2025. Exploring sorghum flour as a sustainable ingredient in gluten-free cookie production. *Foods*, 14(2668): 1–18.
- Caesy, C. P., Sitania, C. K., Gunawan, S., & Wirawasista, H. 2018. Pengolahan tepung sagu dengan fermentasi aerobik menggunakan rhizopus sp. *Jurnal Teknik Its*, 7(1): 132–134.
- Cahyadi, C., Irbah, A., Saputri, M. I., Capah, N. Z., Nurbaeti, M., & Destiana, I. D. 2024. Analisis fisikokimia tepung bonggol pisang kepok (*Musa paradisiaca* L.) termodifikasi menggunakan starter bimo-cf. *Edufortech*, 9(1): 51–58.
- CEEREAL. 2010. *Cereal portion sizes*.
- Codex. 1989. Standart for sorghum flour (CXS 173-1989). In *FAO/WHO Codex Alimentarius Commision*.
- Colla, K., Costanzo, A., & Gamlath, S. 2018. Fat replacers in baked food products. *Foods*, 7(192): 1–12.
- Dayib, M., Larson, J., & Slavin, J. 2020. Dietary fibers reduce obesity-related disorders: mechanisms of action. *Current Opinion in Clinical Nutrition and Metabolic Care*, 23(6): 445–450.
- Devi, A., & Khatkar, B. S. 2016. Physicochemical, rheological and functional properties of fats and oils in relation to cookie quality: a review. *Journal of Food Science and Technology*, 53(10): 3633–3641.
- Dewi, K. M. K., Wiadnyani, A. A. I. S., & Puspawati, G. A. K. D. 2023. Karakteristik dan potensi pangan fungsional flakes dengan perbandingan tepung keladi alami (*Xanthosoma sagittifolium*) dan termodifikasi heat moisture treatment (HMT) characteristics. *Itepa: Jurnal Ilmu Dan Teknologi Pangan*, 12(4): 882–889.
- Dewi, S. R., Widyasanti, A., & Putri, S. H. 2023. Pengaruh konsentrasi pati

singkong terhadap karakteristik edible film berbahan pati singkong dengan penambahan ekstrak daun belimbing wuluh. *Jurnal Keteknikan Pertanian Tropis Dan Biosistem*, 11(2): 158–167.

Divya, P. M., Roopa, B. S., Manusha, C., & Balannara, P. 2023. A concise review on oil extraction methods, nutritional and therapeutic role of coconut products. *Journal of Food Science and Technology*, 60(2): 441–452.

Donmez, D., Pinho, L., Patel, B., Desam, P., & Campanella, O. H. 2021. Characterization of starch-water interactions and their effects on two key functional properties: starch gelatinization and retrogradation. *Current Opinion in Food Science*, 39: 103–109.

El-Sayed, M., & Aal-Abdel. 2009. Functionality of starches and hydrocolloids in gluten-free foods. In *Gluten-Free Food Science and Technology* (pp. 200–224).

El Hosry, L., Elias, V., Chamoun, V., Halawi, M., Cayot, P., Nehme, A., & Bou-Maroun, E. 2025. Maillard reaction: mechanism, influencing parameters, advantages, disadvantages, and food industrial applications: a review. *Foods*, 14(11): 1–43.

Erawati, C. M., & Dewi, A. D. R. 2022. Optimasi formula tepung komposit tinggi protein dan seng dengan response surface methodology. *Jurnal Teknologi Dan Industri Pangan*, 33(2): 119–128.

Faridah, D. N., Fardiaz, D., Andarwulan, N., & Sunarti, T. C. 2014. Karakteristik sifat fisikokimia pati garut. *Agritech*, 34(1): 14–21.

Fast, R. B., Perdon, A. A., & Schonauer, S. L. (2020). Breakfast Cereals and How They Are Made: Raw Materials, Processing, and Production. In *Woodhead Publishing and AACC International Press*. <https://doi.org/10.1016/B978-0-12-812043-9.00002-3>

Fathurrizqiah, R., & Panunggal, B. 2015. Kandungan pati resisten, amilosa, dan amilopektin snack bar sorgum sebagai alternatif makanan selingan bagi penderita diabetes mellitus tipe 2. *Journal of Nutrition College*, 4(2): 562–569.

Fatmawati, A. H., Adawiyah, D. R., & Wulandari, N. 2021. Optimasi formula produk gel oles berbahan dasar biji selasih menggunakan teknik response surface methodology. *AgriTECH*, 41(3): 294–304.

Fauziyah, Z., Nia, L., Nandi, F. J., Lingga, R., & Helmi, H. 2023. Identifikasi dan potensi probiotik bakteri asam laktat pada pangan fermentasi lokal. *Jurnal Bios Logos*, 13(2): 54–64.

Fennema, O. W. 1985. *Principle of Food Science* (2nd (ed)). Food Chemistry.

- Fernando, W. M. A. D. B., Martins, I. J., Goozee, K. G., Brennan, C. S., Jayasena, V., & Martins, R. N. 2015. The role of dietary coconut for the prevention and treatment of Alzheimer's disease: potential mechanisms of action. *British Journal of Nutrition*, 114: 1–14.
- Fitriani, S., Yusmarini, Riftyan, E., Saputra, E., & Rohmah, M. C. 2023. Karakteristik dan profil pasta pati sagu modifikasi prigelatinisasi pada suhu yang berbeda. *Jurnal Teknologi Hasil Pertanian*, 16(2): 104–115.
- Frimpong, T. G., Wireko-manu, F. D., & Oduro, I. 2022. Development and sensory assessment of ready-to-eat breakfast cereal. *International Journal of Food Science*, 1–7.
- Garnida, Y. 2020. *Uji Inderawi & Sensori pada Industri Pangan* (A. S. Hamidin (ed.)). Manggu Makmur Tanjung Lestari.
- Garnida, Y., Hervelly, & Rahma, R. N. 2019. Modifikasi tepung ganyong (*Canna edulis kerr.*) metode heat moisture treatment pada suhu dan waktu pemanasan berbeda dan aplikasi tepung pada pembuatan cookies. *Pasundan Food Technol Journal*, 6(1): 65–72.
- Gawarti, Syamsidah, & Febriani, N. R. M. 2022. Pemanfaatan tepung ampas kelapa (*Cocos nucifera*) sebagai bahan substitusi dalam pembuatan coconut crispy untuk meningkatkan potensi usaha. *Jurnal Edukasi Dan Pengabdian Kepada Masyarakat*, 1(2): 75–82.
- Ghania, R., Yanti, R., & Manikharda. 2024. Karakteristik sensori dan fisikokimia biskuit berbahan baku tepung kacang merah dan tepung ubi jalar ungu. *Jurnal Teknologi Hasil Pertanian*, 17(2): 187–199.
- Gibney, M. J., Barr, S. I., Bellisle, F., Drewnowski, A., Fagt, S., Livingstone, B., Masset, G., Moreiras, G. V., Moreno, L. A., Smith, J., Vieux, F., Thielecke, F., & Hopkins, S. 2018. Breakfast in human nutrition: the international breakfast research initiative. *Nutrients*, 10(5): 1–12.
- Gionte, F., Limonu, M., & Liputo, S. A. 2022. Karakteristik dan daya terima flakes berbahan dasar tepung ubi jalar ungu yang di formulasi dengan tepung bekatul. *Jambura Journal of Food Technology*, 4(1): 34–44.
- Gloria, J. S., Wisaniyasa, N. W., & Yusa, N. M. 2022. Pengaruh perbandingan tepung beras merah (*Oryza nivara L.*) dan tepung kecambah kacang merah (*Phaseolus vulgaris L.*) terhadap karakteristik flakes. *Itepa: Jurnal Ilmu Dan Teknologi Pangan*, 11(2): 350–361.
- Gozaly, T., Sutrisno, E. T., & Saleha, N. M. 2019. Optimasi formulasi flakes berbasis tepung ubi cilembu tepung tapioka serta tepung kacang hijau. *Pasundan Food Technology Journal*, 6(1): 40–50.

- Hadistio, A., Jumiono, A., & Fitri, S. 2019. Tepung mocaf (*modified cassava flour*) untuk ketahanan pangan indonesia. *Jurnal Ilmiah Pangan Halal*, 1(1): 13–17.
- Hasrini, R. F., & Khoiriyah, A. 2018. Analisis produk krim kental manis dalam rangka pengembangan standar nasional indonesia baru. *Jurnal Standardisasi*, 20(3): 171–179.
- He, Y., Wang, B., Wen, L., Wang, F., Yu, H., Chen, D., Su, X., & Zhang, C. 2022. Effects of dietary fiber on human health. *Food Science and Human Wellness*, 11: 1–10.
- Hersoelistyorini, W., Dewi, S. S., & Kumoro, A. C. 2015. Sifat fisikokimia dan organoleptik tepung mocaf (*modified cassava flour*) dengan fermentasi menggunakan ekstrak kubis. *The 2nd University Research Colloquium*: 10–17.
- Heryana, A. 2023. Bekerja dengan data tidak normal. In *Esa Unggul*.
- Hidayat, I. R., Zuhrotun, A., & Sopyan, I. 2021. Design-expert software sebagai alat optimasi formulasi sediaan farmasi. *Majalah Farmasetika*, 6(1): 99–120.
- Hunaefi, D., & Ulfah, F. 2019. Pendugaan umur simpan produk pastry dengan quantitative descriptive analysis (QDA) dan metode arrhenius. *Jurnal Mutu Pangan: Indonesian Journal of Food Quality*, 6(2): 72–78.
- Hustiany, R. 2016. Reaksi maillard pembentuk citarasa dan warna pada produk pangan. In *Lambung Mangkurat University Press* (1st ed., Vol. 1, Issue 1). Lambung Mangkurat University Press.
- ICRISAT, & FAO. 1996. *The world sorghum and millet economies*.
- Ilyasa, S. N., Hodijat, A., & Putranto, K. 2024. Pengaruh Konsentrasi Starter Bimo-CF dan Waktu Fermentasi terhadap Karakteristik Tepung Mocaf. *Jurnal Dimamu*, 3(2): 177–186.
- Jensen, W. A. 2016. Confirmation runs in design of experiments. *Journal of Quality Technology*, 48(2): 162–177.
- Jiamjariyatam, R., Roskhrua, P., & Attiwittayaporn, S. 2021. Effect of coconut flour on biscuit quality. *Journal of Culinary Science & Technology*: 1–15.
- Kahfi, M. A., Sutisna, A. N., & Cecep, A. R. 2021. Using design expert d-optimal for formula optimization of functional drink that enriched with moringa leaf extract (*Moringa oleifera*). *IOP Conf. Series: Earth and Environmental Science*: 1–11.
- Kakan, A., Changade, S., & Chopde, S. 2016. Effect of incorporation of Paneer whey on dough characteristics and organoleptic attributes of milk bread. *Asian Journal of Dairy and Food Research*, 35(2): 143–148.

- Khairunnisa, Harun, N., & Rahmayuni. 2018. Pemanfaatan tepung talas dan tepung kacang hijau dalam pembuatan flakes. *Jurnal Sagu*, 17(1): 19–28.
- Kinanti, P. S. K., Amanto, B. S., & Atmaka, W. 2014. Kajian karakteristik fisik dan kimia tepung sorghum (*Sorghum bicolor* L.) varietas madu termodifikasi yang dihasilkan dengan variasi konsentrasi dan lama perendaman asam laktat. *Teknosains Pangan*, 3(1): 135–144.
- 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(32): 1–8.
- Kneifel, W., & Seiler, A. 1993. Water-holding properties of milk protein products - a review. *Food Structure*, 12(3): 297–308. <http://digitalcommons.usu.edu/foodmicrostructure%5Cnhttp://digitalcommons.usu.edu/foodmicrostructure/vol12/iss3/3>
- Kobue-lekalake, R. I., Taylor, J. R. N., & Kock, H. L. De. 2007. Effects of phenolics in sorghum grain on its bitterness, astringency and other sensory properties. *Journal of the Science of Food and Agriculture*, 87, 1940–1948.
- Komala, A., Yusmarini, & Rahmayuni. 2017. Kajian pemanfaatan tepung sukun dan tepung ampas kelapa dalam pembuatan flakes. *Sagu*, 16(2): 1–9.
- Kong, X. 2020. Fine structure of amilosa dan amilopektin. In S. Wang (Ed.), *Starch Structure, Functionality and Application in Foods* (pp. 29–39). <https://doi.org/10.1007/978-981-15-0622-2>
- Kumalasari, I. D., & Budiati, R. 2024. Analisis sifat fisiko-kimia, mikrobiologi, dan organoleptik flakes berbahan dasar tepung sorgum (*Sorghum bicolor* L.) dan tepung kacang kedelai (*Glycine max* L.). *JST (Jurnal Sains Dan Teknologi)*, 13(1): 99–109.
- Kumari, A., & Mehta, P. K. 2022. An overview of Microbial α -amylase and recent biotechnological developments. *Current Biotechnology*, 11: 10–26.
- Kurniadi, M., Andriani, M., Faturhman, F., & Damayanti, E. 2013. Karakteristik fisikokimia tepung biji sorgum (*Sorghum bicolor* L.) terfermentasi bakteri asam laktat *Lactobacillus acidophilus*. *Agritech*, 33(3): 288–295.
- Kurniadi, M., Arsyad, M. ., Sari, A. M., Nurhayati, R., & Wiyono, T. 2019. The effect of fermentation duration and starter concentration on physico-chemical properties of modified sorghum flour by *Lactobacillus plantarum* FNCC 0027. *Food Research*, 3(5): 441–447.
- Lembong, E., Wulandari, E., Harlina, P. W., & Tsalitsu, S. 2025. Fermentation on the physico and functional properties of red sorghum flour (*Sorghum bicolor* L.). *Chimica et Natura Acta*, 13(2): 115–126.

- Lin, X., Zhang, X., & Xu, B. 2023. Morphological, structural, thermal, pasting, and digestive properties of starches isolated from different varieties of rice: a systematic comparative Study. *Foods*, 12: 1–20.
- Liu, T., Zhen, X., Lei, H., Li, J., Wang, Y., Gou, D., & Zhao, J. 2024. Investigating the physicochemical characteristics and importance of insoluble dietary fiber extracted from legumes: an in-depth study on its biological functions. *Food Chemistry: X*, 22: 1–12.
- Luckett, C. R., & Wang, Y. J. 2012. Application of enzyme-treated corn starches in breakfast cereal coating. *Journal of Food Science*, 77(8): 1–6. <https://doi.org/10.1111/j.1750-3841.2012.02794.x>
- Mahmudah, N. A., Amanto, B. S., & Widowati, E. 2017. Karakteristik fisik, kimia, dan sensoris flakes pisang kepok samarinda (*Musa paradisiaca balbisiana*) dengan substitusi pati garut. *Jurnal Teknologi Hasil Pertanian*, 10(1): 32–41.
- Manuhara, G. J., Amanto, B. S., & Astuti, T. A. 2016. Effect of drying temperatures on physical characteristics of sorghum flour modified with lactic acid. *IOP Conference Series: Materials Science and Engineering*, 193(1): 1–6.
- Mao, C., Wu, S., Zhang, L., & Zhuang, H. 2024. Effects of fermentation modification and combined modification with heat-moisture treatment on the multiscale structure, physical and chemical properties of corn flour and the quality of traditional fermented corn noodles. *Foods*, 13: 1–23.
- Matz, S. A. 1991. *Chemistry and technology of cereals as food and feed* (2nd ed.). Springer New York, NY.
- Mert, S., Sahin, S., & Sumnu, G. 2015. Development of gluten-free wafer sheet formulations. *LWT - Food Science and Technology*, 63(2): 1121–1127.
- Mirratunnisya, Ujianti, R. M. D., Muflihati, I., & Nurdyansyah, F. 2022. Studi pembuatan flakes dari ubi jalar putih (*Ipomea batatas*) dan kacang hijau (*Vigna radiata L.*). *TEKNOBUGA: Jurnal Teknologi Busana Dan Boga*, 10(2): 124–130.
- Misgiyarta, Suismono, & Suyanti. 2009. Tepung kasava bimo kian prospektif. *Balai Besar Litbang Pascapanen Pertanian*, 1–6.
- Moede, F. H., Gonggo, S. T., & Ratman. 2017. Pengaruh lama waktu fermentasi terhadap kadar bioetanol dari pati ubi jalar kuning (*Ipomea batata L.*). *Jurnal Akademika Kimia*, 6(2): 86–91.
- Mohapatra, D., Patel, A. S., Kar, A., Deshpande, S. S., & Tripathi, M. K. 2019. Effect of different processing conditions on proximate composition, anti-oxidants, anti-nutrients and amino acid profile of grain sorghum. *Food Chemistry*, 271: 129–135.

- Mulyandari, R. S. H. 2018. 600 Teknologi inovatif pertanian. In R. S. H. Mulyandari (Ed.), *Badan Penelitian dan Pengembangan Pertanian* (1st ed.). IAARD Press.
- Mulyaningsih, Y., & Rosida, J. 2002. Membandingkan hasil analisis energi total menggunakan bom kalorimeter dengan hasil analisis proksimat. *Temu Teknis Fungsional Non Peneliti*: 93–97.
- Naik, B., Kumar, V., Goyal, S. K., Tripathi, A. D., Mishra, S., Saris, P. E. J., Kumar, A., Rizwanuddin, S., Kumar, V., & Rustagi, S. 2023. Pullulanase: unleashing the power of enzyme with a promising future in the food industry. *Frontiers in Bioengineering and Biotechnology*, 11: 1–16.
- Neeharika, B., Suneetha, W. J., Kumari, B. A., & Tejashree, M. 2020. Leavening agents for food industry. *International Journal Od Current Microbiology and Applied Sciences*, 9(9): 1812–1817.
- Nopiani, Y., Ayu, D. F., Rossi, E., Zalfiatri, Y., & Nurhadijah, S. 2023. Pengaruh tepung ampas kedelai dalam pembuatan flakes ubi jalar merah. *Jurnal Teknologi Pertanian*, 23(2): 95–104.
- Nuraida, L., Hasanah, U., Athaya, D. R., & Refita, K. 2022. *Teknologi fermentasi pangan* (T. Panandita (ed.); 1st ed.). PT Penerbit IPB Press.
- Nurhidayanti, A., Dewi, S. A., & Narsih. 2017. Pembuatan flakes dengan variasi tepung gandum dan tepung kelapa dalam upaya peningkatan mutu flakes. *Jurnal Teknologi Pangan*, 8(2):155–162.
- Nuriana, A., Aini, N., & Karseno. 2019. Formulasi breakfast meal flakes dari tepung suweg dan stabilized rice bran menggunakan metode respon permukaan. *Jurnal Aplikasi Teknologi Pangan*, 8(2): 52–59.
- Nuzuliyanti, S., Arham, R., Dahlia, & Amrullah. 2025. Optimization of the fermentation process in the manufacture of modified porang flour using the biologically modified cassava flour starter. *Food Research*, 9(4): 266–275.
- Octavia, R., Indriastuti, A., & Napang, S. 2023. Pembuatan flakes dari pangan tepung beras merah (*Oriza niavara*) dengan penambahan labu kuning (*Cucurbita moschata* durch). *Journal of Chemical Process Engineering*, 8(1): 31–39.
- Ofori-Asenso, R., Owen, A. J., & Liew, D. 2019. Skipping breakfast and the risk of cardiovascular disease and death: A systematic review of prospective cohort studies in primary prevention settings. *Journal of Cardiovascular Development and Disease*, 6(3): 1–11.
- Ogodo, A. C., Ugbogu, O. C., Onyeagba, R. A., & Okereke, H. C. 2019. Microbiological quality, proximate composition and in vitro starch/protein

- digestibility of sorghum bicolor flour fermented with lactic acid bacteria consortia. *Chemical and Biological Technologies in Agriculture*, 6(7): 1–9.
- Pan, L., Feng, S., Li, W., & Zhu, W. 2023. Sorghum tannin extract impedes in vitro digestibility and fermentability of nutrients in the simulated porcine gastrointestinal tract. *Journal of Animal Science*, 101: 1–11.
- Papunas, M. E., Djarkasi, G. S. S., & Moningka, J. S. C. 2013. Karakteristik fisikokimia dan sensoris flakes berbahan baku tepung jagung (*Zea mays L*), tepung pisang goroho (*Musa acuminata* sp.) dan tepung kacang hijau (*Phaseolus cocos*), 3(5).
- Paramita, A. H., & Putri, W. D. R. 2015. Pengaruh penambahan tepung bengkuang dan lama pengukusan terhadap karakteristik fisik, kimia dan organoleptik flake talas. *Pangan Dan Agroindustri*, 3(3): 1071–1082.
- Perdon, A. A., Poutanen, K. S., & Schonauer, S. L. 2020. Breakfast cereals and how they are made-Introduction. In *Breakfast Cereals and How They Are Made: Raw Materials, Processing, and Production* (3rd ed., pp. 1–4). Elsevier Inc.
- Polii, F. F. 2017. Pengaruh substitusi tepung kelapa terhadap kandungan gizi dan sifat organoleptik kue kering. *Buletin Palma*, 18(2): 91–98.
- Pombo-Rodrigues, S., Hashem, K. M., He, F. J., & Macgregor, G. A. 2017. Salt and sugars content of breakfast cereals in the UK from 1992 to 2015. *Public Health Nutrition*, 20(8): 1500–1512.
- Purnamasari, I. W., & Putri, W. D. R. 2015. Pengaruh penambahan tepung labu kuning dan natrium bikarbonat terhadap karakteristik flake talas. *Jurnal Pangan Dan Agroindustri*, 3(4) 1375–1385.
- Purwati, D., Khirzin, M. H., Prastujati, A. U., Sari, D., & Prayitno, S. S. 2024. Identifikasi lexicon (bahasa sensori) dalam pengembangan profil greek yoghurt menggunakan panelis terlatih. *Journal of Animal Science*, 9(1): 25–31.
- Putri, A. L. O., & Kusdiyantini, E. 2018. Isolasi dan identifikasi bakteri asam laktat dari pangan fermentasi berbasis ikan (*Inasua*) yang diperjualbelikan di Maluku-Indonesia. *Jurnal Biologi Tropika*, 1(2): 6–12.
- Rady, E. H. A., El-Sheikh, A. A., & Othman, S. 2021. The distribution of the coefficient of determination in linear regression model: a review. *Journal of University of Shanghai for Science and Technology*, 23(9): 126–127.
- Rahayu, A. P., Istianah, N., & Ali, D. Y. 2019. Pengaruh proporsi tepung sorgum dan tepung sagu aren terhadap sifat fisik mie kering bebas gluten. *Jurnal Pangan Dan Agroindustri*, 7(4): 22–30.

- Rahmadhani, R., & Fibrianto, K. 2016. Proses penyiapan mahasiswa sebagai panelis terlatih dalam pengembangan lexicon (bahasa sensori) susu skim uht dan susu kaya lemak uht. *Jurnal Pangan Dan Agroindustri*, 4(1): 190–200.
- Rahmawati, L. K., Muhandri, T., Iwansyah, A. C., Palupi, N. S., & Ambarwati, K. 2025. Optimization of breakfast meal flakes based on modified jali flour. *Jurnal Teknologi dan Industri Pangan*, 36(1): 13–27.
- Rakhmawati, N., Amanto, B. S., & Praseptianga, D. 2014. Formulation and evaluation sensory characteristic and physic chemical of composite flakes product which made from tapioca flour, red beans flour (*Phaseolus vulgaris* L.) and konjac flour (*Amorphophallus oncophillus*). *Teknosains Pangan*, 3(1): 63–73.
- Ramadhani, R. A., Riyadi, D. H. S., Triwibowo, B., & Kusumaningtyas, R. D. 2017. Review pemanfaatan design expert untuk optimasi komposisi campuran minyak nabati sebagai bahan baku sintesis biodiesel. *Jurnal Teknik Kimia Dan Lingkungan*, 1(1): 11–16.
- Ramya, H., & Pattan, N. 2019. Development and quality evaluation of ready-to-use coconut flour. *International Journal of Current Research*, 11(3): 2512–2514.
- Reyniers, S., Ooms, N., & Delcour, J. A. 2020. Transformations and functional role of starch during potato crisp making: a review. *Journal of Food Science*, 85(12): 4118–4129.
- Ridhani, M. A., Vidyaningrum, I. P., Akmala, N. N., Fatihatunisa, R., Azzahro, S., & Aini, N. 2021. Potensi penambahan berbagai jenis gula terhadap sifat sensori dan fisikokimia roti manis: review. *Pasundan Food Technology Journal*, 8(3): 61–68.
- Rosidah, M., Indrianti, N., & Budiati, T. 2025. Karakteristik profil gelatinisasi pasta berbagai jenis tepung sorgum lokal di indonesia. *JOFE : Journal of Food Engineering*, 4(2): 92–101.
- Sabilla, N. F., & Murtini, E. S. 2020. Pemanfaatan tepung ampas kelapa dalam pembuatan flakes cereal (kajian proporsi tepung ampas kelapa: tepung beras). *Jurnal Teknologi Pertanian*, 21(3): 155–164.
- Saittagaroon, S., Kawakishi, S., & Namiki, M. 1984. *Aroma constituents of roasted coconut*. 48(9): 2301–2307.
- Sari, P. M., Muhardina, V., Hakim, L., Rahmiati, T. M., & April. 2020. Pengaruh konsentrasi ragi (*Saccharomyces cerevisiae*) dan lama fermentasi terhadap kualitas cuka air kelapa (*Cocos nucifera*). *Jurnal TEKSAGRO*, 1(2): 39–46.
- Sarofa, U., Witjaksono, L. A., Salsabila, A., & Ishaqy, M. A. S. 2023. Pengaruh proporsi tepung sorgum termodifikasi dan tapioka serta lama pengukusan terhadap karakteristik flakes. *JITIPARI (Jurnal Ilmiah Teknologi Dan Industri*

Pangan UNISRI), 8(1): 56–64.

Setiaji, B. 2012. *Pengaruh suhu dan lama pemanggangan terhadap karakteristik soyflakes (Glycine max L)*. Universitas Pasundan, Bandung.

Setiarto, R. H. B., & Widhyastuti, N. 2017. Pengaruh fermentasi bakteri asam laktat dan siklus pemanasan bertekanan-pendinginan terhadap kadar pati resisten tepung ubi jalar ungu (*Ipomea batatas var ayamurasaki*) termodifikasi. *Journal of Agro-Based Industry*, 34(1): 26–35.

Setiarto, R. H. B., Widhyastuti, N., & Saskiawan, I. 2016. Pengaruh fermentasi fungi, bakteri asam laktat dan khamir terhadap kualitas nutrisi tepung sorgum. *Agritech*, 36(4): 440–449.

Setiarto, R. H. B., Widhyastuti, N., & Saskiawan, I. 2017. Karakteristik amilografi tepung sorgum fermentasi dan aplikasinya pada produk cake dan cookies. *Jurnal Dinamika Penelitian Industri*, 28(1): 10–19.

Setiarto, R. H. B., Widhyastuti, N., & Setiadi, D. 2018. Peningkatan pati resisten tepung sorgum termodifikasi melalui fermentasi dan siklus pemanasan bertekanan-pendinginan. *Jurnal Ilmu Pertanian Indonesia*, 23(1): 10–20.

Seveline, Oktafiana, H., Indriatama, W. M., & Taufik, M. 2021. Pengaruh penambahan bakteri asam laktat terhadap karakteristik kimia dan organoleptik tepung sorgum fermentasi. *Jurnal Teknologi Industri Pertanian*, 15(1): 106–114.

Shakeela, H., Mohan, K., & Nisha, P. 2024. Unlocking a nutritional treasure: health benefits and sustainable applications of spent coconut meal. *Sustainable Food Technology*, 2(3): 497–505.

Simwaka, J. E., Chamba, M. V. M., Huiming, Z., Masamba, K. G., & Luo, Y. 2017. Effect of fermentation on physicochemical and antinutritional factors of complementary foods from millet, sorghum, pumpkin and amaranth seed flours. *International Food Research Journal*, 24(5): 1869–1879.

Sofyani, S., Kandou, J. E. A., & Sumual, M. F. 2019. Pengaruh penambahan tepung tapioka dalam pembuatan biskuit berbahan baku tepung ubi banggai (*Dioscorea alata L.*). *Jurnal Teknologi Pertanian (Agricultural Technology Journal)*, 10(2): 73–84.

Statista. 2025. *Breakfast Cereal-Worldwide*.
<https://www.statista.com/outlook/cmo/food/bread-cereal-products/breakfast-cereals/worldwide?currency=usd>

Stoin, D., Jianu, C., Velciov, A. B., & Cocan, I. 2020. Sensorial and nutritional quality of gluten-free cookies developed from rice and coconut flour mixtures. *Journal of Agroalimentary Processes and Technologies*, 26(4): 397–405.

- Suarni. 2016. Peran sifat fisikokimia sorgum dalam diversifikasi pangan dan industri serta prospek pengembangannya. *Jurnal Penelitian Dan Pengembangan Pertanian*, 35(3): 99–110.
- Sujithra, B., Deepika, S., Akshaya, K., & Ponnusami, V. 2019. Production and optimization of xanthan gum from three-step sequential enzyme treated cassava bagasse hydrolysate. *Biocatalysis and Agricultural Biotechnology*, 21, 1–8.
- Surya, R., Romulo, A., & Susilo, E. 2021. Optimization of functional beverage formula made from turmeric, tamarind, and ginger by D-optimal mixture design. *IOP Conference Series: Earth and Environmental Science*, 794, 1–8.
- Susanti, I., Lubis, E. H., & Meilidayani, S. 2017. Flakes sarapan pagi berbasis mocaf dan tepung jagung. *Journal of Agro-Based Industry*, 34(1): 44–52.
- Tamtarini, & Yuwanti, S. 2005. Pengaruh penambahan koro-koroan terhadap sifat fisik dan sensorik flake ubi jalar. *Jurnal Teknologi Pertanian*, 6(3): 187–192.
- Thilakarathna, G. C., Navarathne, S. B., & Wickramasinghe, I. 2017. Identification of important physical properties and amylose content in commercially available improved and traditional rice varieties in sri lanka. *International Journal of Advanced Engineering Research and Science*, 4(12): 186–194.
- Ulfa, A. M., Winahyu, D. A., & Jasuma, M. 2017. Penetapan kadar lemak margarin merk x dengan kemasan dan tanpa kemasan dengan metode sokletasi. *Jurnal Analisis Farmasi*, 2(4): 258–262.
- USDA. 2024. *Sorghum Grain, White, Pearled, Unenriched, Dry, Raw*. National Nutrient Database for Standard References. USA: Agriculture Research Service. <https://fdc.nal.usda.gov/food-details/2710841/nutrients>
- Vijayakumar, V., Shankar, N. R., Mavathur, R., Mooventhana, A., Anju, S., & Manjunath, N. 2018. Diet enriched with fresh coconut decreases blood glucose levels and body weight in normal adults. *Journal of Complementary and Integrative Medicine*: 1–7.
- Wanyonyi, S. W., Okango, A. A., & Koech, J. K. 2021. Exploration of D-, A-, I- and G- optimality criteria in mixture modeling. *Asian Journal of Probability and Statistics*, 12(4): 15–28.
- Weber, C., Harnack, L., Johnson, A., Jasthi, B., Pettit, J., & Stevenson, J. 2021. Nutrient comparisons of margarine/margarine-like products, butter blend products and butter in the US marketplace in 2020 post-FDA ban on partially hydrogenated oils. *Public Health Nutrition*, 25(5): 1123–1130.
- Wei, C., Ge, Y., Zhao, S., Liu, D., Jiliu, J., Wu, Y., Hu, X., Wei, M., Wang, Y., Wang, W., Wang, L., & Cao, L. 2022. Effect of fermentation time on

- molecular structure and physicochemical properties of corn ballast starch. *Frontiers in Nutrition*, 9: 1–12.
- Widyatmoko, H., Subagio, A., & Nurhayati, N. 2018. Sifat-sifat fisikokimia pati ubi kayu terfermentasi khamir indigenus tapai. *Agritech*, 38(2): 140–150.
- Wu, G., Ashton, J., Simic, A., Fang, Z., & Johnson, S. K. 2018. Mineral availability is modified by tannin and phytate content in sorghum flaked breakfast cereals. *Food Research International*, 103: 509–514.
- Xiang, J., Liu, F., Wang, B., Chen, L., Liu, W., & Tan, S. 2021. A literature review on maillard reaction based on milk products : advantages , disadvantages , and avoidance strategies. *Foods*, 10(1998): 1–18.
- Xu, S., & Kerr, W. L. 2012. Comparative study of physical and sensory properties of corn chips made by continuous vacuum drying and deep fat frying. *LWT-Food Science and Technology*, 48(1): 96–101.
- Yan, S., Li, Z., Wang, B., Li, T., Li, Z., Zhang, N., & Cui, B. 2023. Correlation analysis on physicochemical and structural properties of sorghum starch. *Frontiers in Nutrition*, 1–16.
- Yashinta, M. R., Handayani, C. B., & Afriyanti. 2021. Karakteristik kimia, fisik dan organoleptik cookies tepung mocaf dengan variasi jenis dan konsentrasi lemak. *Journal of Food and Agricultural Product*, 1(1): 1–11.
- Yazid, N. S. M., Abdullah, N., Muhammad, N., & Peralta, H. M. M. 2018. Application of starch and starch-based products in food industry. *Journal of Science and Technology*, 10(2): 144–174.
- Yulistiani, R., Rosida, & Kumala, I. W. 2021. Karakteristik fisikokimia dan organoleptik flakes : kajian proporsi tepung talas termodifikasi dan tepung kacang tunggak serta penambahan natrium bikarbonat. *Jurnal Teknologi Pangan*, 15(1): 21–36.
- Yulvianti, M., Ernayati, W., Tarsono, & R, M. A. 2015. Pemanfaatan ampas kelapa sebagai bahan baku tepung kelapa tinggi serat dengan metode freeze drying. *Jurnal Integrasi Proses*, 5(2): 101–107.
- Yusra, S., & Putri, E. 2022. Karakteristik fisikokimia tepung sorgum (*Sorghum bicolor* L.) varietas lokal merah dengan fermentasi spontan. *Jurnal Agroteknologi*, 16(2): 163–175.
- Zhao, T., Li, X., Zhu, R., Ma, Z., Liu, L., Wang, X., & Hu, X. 2019. Effect of natural fermentation on the structure and physicochemical properties of wheat starch. *Carbohydrate Polymers*, 218: 163–169.