

DAFTAR PUSTAKA

- Adzqia, F., Suwonsichon, S., & Thongngam, M. (2023). Effects of white sorghum flour levels on physicochemical and sensory characteristics of gluten-free bread. *Foods*, 12(22), 4113. <https://doi.org/10.3390/foods12224113>
- Alfilaili, B. S., Hajrin, W., dan Julianтони, Y. 2021. Optimasi Konsentrasi Vaseline Album dan Adeps Lanae pada Formulasi Sediaan Salep Ekstrak Etanol Daun Kersen (*Muntingia calabura* L.). *Acta Pharm Indo*, 9(2), hal 119-127.
- AOAC. (2019). *Official Methods of Analysis of the Association of Official Analytical Chemistry International* (20th ed.). AOAC Inc.
- Alibekova, D., et al. (2026). Problems and Approaches in the Improvement of Gluten-Free Bread Texture: A Comprehensive Review. *International Journal of Food Science*. <https://doi.org/10.1155/ijfo/5214023>
- Ardhani, R. F., Anggriani, R., & Sukardi, S. (2024). Pengaruh Formulasi Tepung Mocaf dan Tepung Sorgum (*Sorghum bicolor* L. Moench) Terhadap Karakteristik Fisikokimia Dan Organoleptik Donat Bomboloni *Gluten Free*. *Food Technology and Halal Science Journal*, 6(2), 189–202. <https://doi.org/10.22219/fths.v6i2.28379>.
- Ari Akin, P., Demirkesen, I., Bean, S. R., Aramouni, F., & Boyaci, I. H. (2022). Sorghum flour application in bread: Technological challenges and opportunities. *Foods*, 11(16), 2466. <https://doi.org/10.3390/foods11162466>.
- Asmoro, N. W. (2021). Karakteristik dan sifat tepung singkong termodifikasi (Mocaf) dan manfaatnya pada produk pangan. *Journal of Food and Agricultural Product*, 1(1), 34–43. <https://doi.org/10.32585/jfap.v1i1.1755>
- Avif, A. N., & Oktaviana, A. T. D. (2020). Analisis sifat kimia tepung dan pati sorgum dari varietas bioguma dan lokal di Provinsi Nusa Tenggara Timur, Indonesia. *Lantanida Journal*, 8(2), <https://doi.org/10.22373/lj.v8i2.8120>.
- Badan Standardisasi Nasional. (1995). *SNI 01-3840-1995: Roti manis*. Jakarta: Badan Standardisasi Nasional.
- Badan Standardisasi Nasional. 2006. SNI 01-2346-2006: Petunjuk Pengujian Organoleptik dan/atau Sensori. BSN, Jakarta.
- Batubara, F. I., Dewi, T. K., & Lubis, Y. M. (2023). Quality of *gluten free* bread with the addition of xanthan gum and different kneading methods. *Food ScienTech Journal*, 5(2). <https://doi.org/10.33512/fsj.v5i2.20829>.

- Budiarti, G. I., Sya'bani, I., & Alfarid, M. A. (2021). Pengaruh pengeringan terhadap kadar air dan kualitas bolu dari tepung sorgum (*Sorghum bicolor* L). *Jurnal Fluida*, 14(2), 73–79. <https://doi.org/10.35313/fluida.v14i2.2638>
- Buanasetjio, V. T., Dahlia, M., & Mahdiah. (2023). Analisis perbandingan mixing methods (flour batter method, blending method, all-in method) pada mutu sensoris pound cake. *Jurnal Pendidikan: SEROJA*, 2(5), 331–339.
- BPS. (2023). Impor biji gandum dan meslin menurut Negara Asal Utama, 2017-2023. Jakarta: Badan Perhitungan Statistik.
- Cappelli, A., Oliva, N., & Cini, E. (2020). A systematic review of *gluten-free* dough and bread: Dough rheology, bread characteristics, and improvement strategies. *Applied Sciences*, 10(18), 6559. <https://doi.org/10.3390/app10186559>
- Culetu, A., Duta, D. E., Papageorgiou, M., & Varzakas, T. (2021). The role of hydrocolloids in *gluten-free* bread and pasta; rheology, characteristics, staling and glycemic index. *Foods*, 10(12), 3121. <https://doi.org/10.3390/foods10123121>.
- Curti, M.I., Belorio, M., Palavecino, P.M., Gómez, M., dan Ribotta, P.D. (2022). Effect of sorghum flour properties on gluten-free sponge cake. *Journal of Food Science and Technology*, 59(4), 1407–1418. <https://doi.org/10.1007/s13197-021-05150-0>
- Diniyah, N., Iguchi, M., Nanto, M., Yoshino, T., & Subagio, A. (2023). Dynamic rheological, thermal, and structural properties of starch from modified cassava flour (MOCAF) with two cultivars of cassava. *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 12(1), 89–101. <https://doi.org/10.21776/ub.industria.2023.012.01.8>
- Djekic, I., Lorenzo, J. M., Munekata, P. E. S., Gagaoua, M., & Tomasevic, I. (2021). Review on characteristics of trained sensory panels in food science. *Journal of Texture Studies*, 52(4), 501–509. <https://doi.org/10.1111/jtxs.12616>
- Dwiani, A., & Yuniartini, N. L. P. S. (2022). Kajian sifat kimia brownies panggang dengan substitusi mocaf dan tepung kelor. *Jurnal Agrotek UMMAT*, 9(1). <https://10.31764/jau.v9i1.6731>.
- Encina Zelada, C. R., Cadavez, V., Monteiro, F., Teixeira, J. A., & Gonzales-Barron, U. (2018). Combined effect of xanthan gum and water content on physicochemical and textural properties of gluten-free batter and bread. *Food Research International*, 111, 544–555. <https://doi.org/10.1016/j.foodres.2018.05.070>

- Fairuz, N. A., Ngurah S, I. G. A., & Dahlia, M. (2024). Pengaruh substitusi tepung sorgum putih dalam pembuatan vanilla cupcake terhadap kualitas fisik dan daya terima konsumen. *Jurnal Ilmu Ilmu Agribisnis: Journal of Agribusiness Science*, 12(1), 83–89. <https://doi.org/10.23960/jiia.v12i1.8417>
- Fauziyah, A. I. dan Yunianta. 2019. Pengaruh Perbedaan Formulasi terhadap Sifat Fisik, Kimia dan Organoleptik pada Muffin Non Terigu. *Jurnal Pangan dan Agroindustri* 7(2): 1–12.
- Fetriyuna, F., Salma, A. N., Harlina, P. W., Yarlina, V. P., & Purwestri, R. C. (2026). The role of xanthan gum and hydroxypropyl methylcellulose in gluten-free bread: A study of physical characteristics, texture, and nutrition. *Food Science & Nutrition*. <https://doi.org/10.1002/fsn3.71292>
- Firdaus, A. R. 2023. Optimasi Formula Tepung Sukun dan Gum Xanthan pada Roti Tawar Bebas Gluten Menggunakan Simplex Lattice Design
- Granato, D., Calado, V. M. A., & Pinto, E. (2020). Optimization of food processes using mixture experiments. In M. L. Chavez-Gonzalez, N. Balagurusamy, & C. N. Aguilar (Eds.), *Advances in food bioproducts and bioprocessing technologies* (Chapter 3). CRC Press, Taylor & Francis Group. <https://doi.org/10.1201/9780429436963-3>.
- Gunasekara, D., Bulathgama, A., & Wickramasinghe, I. (2021). Comparison of different hydrocolloids on the novel development of muffins from "purple yam" (*Dioscorea alata*) flour in sensory, textural, and nutritional aspects. *International Journal of Food Science*, 2021, Article 9970291. <https://doi.org/10.1155/2021/9970291>
- Gunawan, S., Rahmawati, N., Larasati, R. B., Dwitasari, I., Aparamarta, H. W., & Widjaja, T. (2021). Reaction kinetics of lactic acid fermentation from bitter cassava (*Manihot glaziovii*) starch by *Lactobacillus casei*. *Indonesian Journal of Biotechnology*, 26(1), 7–14.
- Gunawan, S., Dwitasari, I., Rahmawati, N., Darmawan, R., Wirawasista Aparamarta, H., & Widjaja, T. (2022). Effect of process production on antinutritional, nutrition, and physicochemical properties of modified sorghum flour. *Arabian Journal of Chemistry*, 15(10), Article 104134. <https://doi.org/10.1016/j.arabjc.2022.104134>
- Gunawan. A., Pranata. F. S., Swasti. Y. R. 2024. Kualitas Muffin Dengan Kombinasi Tepung Sorgum (Sorghum Bicolor) Dan Tepung Kacang Merah (Phaseolus Vulgaris). Jurnal Teknologi Hasil Pertanian. Universitas Atma Jaya Yogyakarta. Yogyakarta.
- Hajrin, W., Subaidah, W. A., Juliantoni, Y., & Wirasisya, D. G. (2021). Application of Simplex Lattice Design Method on The Optimisation of Deodorant Roll-on Formula of Ashitaba (*Angelica keiskei*). *Jurnal Biologi Tropis*, 21(2), 501– 509. <https://doi.org/10.29303/jbt.v21i2.2717>.

- Hidayat, I.R., Zuhrotun, A. dan Sopyan, I. 2021. “Design-Expert Software sebagai Alat Optimasi Formulasi Sediaan Farmasi”. *Majalah Farmasetika*, 6(1), hal. 99–120. <https://doi.org/10.24198/mfarmasetika.v6i1.27842>.
- Hoiriyah, S. (2021). Pembuatan Muffin Substitusi Tepung Kedelai Dan Tepung Ubi Jalar Ungu Sebagai Kudapan Bagi Balita Stunting. Politeknik Negeri Jember.
- Haytowitz, D., Ahuja, J., Wu, X., Khan, M., Somanchi, M., Nickle, M., Nguyen, Q., Roseland, J., Williams, J., & Patterson, K. (2018). USDA National Nutrient Database for standard reference, legacy. USDA National Nutrient Database for Standard Reference.
- Ibrahim, M. I., Fizriani, A., & Mardiana. (2024). Karakteristik fisikokimia dan organoleptik mi kering dengan substitusi tepung mocaf (Modified Cassava Flour) dan tepung daun singkong (*Manihot utilissima*). *Journal of the Science of Food and Agriculture*, 1(1), 45–55.
- Jagelaviciute, J., Staniulyte, G., Cizeikiene, D., & Basinskiene, L. (2025). Application of apple by-products and xanthan gum in the development of fiber-enriched *gluten-free* muffins. *Applied Sciences*, 16(2), 922. <https://doi.org/10.3390/app16020922>.
- Jukić, M., Nakov, G., Komlenić, D. K., Vasileva, N., Šumanovac, F., & Lukinac, J. (2022). Quality assessment of cookies made from composite flours containing malted barley flour and wheat flour. *Plants*, 11(6), 761. <https://doi.org/10.3390/plants11060761>
- Keyata, E. O., Tola, Y. B., Bultosa, G., & Forsido, S. F. (2021). Optimization of nutritional and sensory qualities of complementary foods prepared from sorghum, soybean, karkade and premix in Benishangul-Gumuz region, Ethiopia. *Heliyon*, 7(9), e07955. <https://doi.org/10.1016/j.heliyon.2021.e07955>
- Khalid, W., Arshad, M. S., Aslam, N., Mukhtar, S., Rahim, M. A., Ranjha, M. M. A. N., Noreen, S., Afzal, M. F., Aziz, A., & Awuchi, C. G. (2022). Food applications of sorghum derived kafirins potentially valuable in celiac disease. *International Journal of Food Properties*, 25(1), 2348–2363. <https://doi.org/10.1080/10942912.2022.2135532>
- Khotimah, K., Akbar, A. Syauqi., dan A. Zamroni. 2019. “Pengaruh Substitusi Tepung Mocaf (Modified Cassava Flour) terhadap Sifat Fisik dan Sensoris Bolu Kukus.” *Buletin Loupe* 15 (01): 16–23
- Korus, J., Witczak, M., Ziobro, R., & Juszczak, L. (2021). Rapeseed protein as a novel ingredient of gluten-free bread. *European Food Research and Technology*, 247(8), 2015–2025. <https://doi.org/10.1007/s00217-021-03768-0>

- Kurek, M., Moczowska-Wyrwisz, M., dan Wyrwisz, J. (2021). Development of Gluten-Free Muffins with β -Glucan and Pomegranate Powder Using Response Surface Methodology. *Foods*, 10(11), 2551.
- Matita, I. C., Soedirga, L. C., & Andriani, I. (2024). Utilization of Chia Seeds Powder in Wet Noodle Substituted with Modified Cassava Flour. *Caraka Tani: Journal of Sustainable Agriculture*, 39(1), 140–153. <https://doi.org/10.20961/carakatani.v39i1.77711>
- Melini, V., & Melini, F. (2020). A Systematic Review of Gluten-Free Dough and Bread: Dough Rheology, Bread Characteristics, and Improvement Strategies. *Applied Sciences*, 10(18), 6559. <https://doi.org/10.3390/app10186559>
- Mir, S. A., Shah, M. A., & Naik, H. R. (2019). *Gluten-free products: Advances and challenges*. *Journal of Food Science and Technology*, 56(3), 1267–1277. <https://doi.org/10.1007/s13197-019-03679-9>.
- Muniroh, P. L., & Hasanah, L. N. (2024). Formulasi dan kandungan gizi *cookies gluten free casein free* (GFCF) berbahan *modified cassava flour* (MOCaf), garut dan tempe koro. *Jurnal Kesehatan Tambusai*, 5(3). <https://doi.org/10.31004/jkt.v5i3.32696>.
- Nooshkam, M., Varidi, M., & Verma, D. K. (2020). Functional and biological properties of Maillard conjugates and their potential application in medical and food: A review. *Food Research International*, 131, 109003. <https://doi.org/10.1016/j.foodres.2020.109003>.
- Nur, R., Lioec, H. N., Palupi, N. S. dan Nurtama B. 2018. Optimasi Formula Sari Edamame dengan Proses Pasteurisasi Berdasarkan Karakteristik Kimia dan Sensori. *Jurnal Mutu Pangan*, 5(2), hal. 88–99.
- Nurrizka, Satriana, & Zaidiyah. (2023). Studi Literatur : Pemanfaatan Mocaf (Modified cassava flour) sebagai Substrat dalam Pembuatan Sourdough. *Jurnal Ilmiah Mahasiswa Pertanian*, 8(4), 458–464.
- Nur'utami, D.A., Fitrilia, T., dan Oktavia, D. (2020). Pengaruh Lama Fermentasi terhadap Karakteristik Sensori dan Daya Kembang Roti Mocaf (Modified Cassava Flour). *Jurnal Agroindustri Halal*, 6(2), 197–205. <https://doi.org/10.30997/jah.v6i2.3255>
- Pasha, R. S. (2018). Variasi Campuran Tepung Sorgum Pada Pembuatan Muffin Di Tinjau Dari Sifat Fisik, Sifat Organoleptik dan Kadar Serat Pangan. *Skripsi Gizi Terapan*, 7–38.
- Parsamajd, M., Fazaeli, M., Majdinasab, M., & Golmakani, M.-T. (2025). Synergistic effects of hydrocolloid combinations on gluten-free batter and bread characteristics. *Food Science & Nutrition*, 13(10), e71107. <https://doi.org/10.1002/fsn3.71107>

- Prabudi, M., Nurtama, B., & Purnomo, E. H. (2018). Aplikasi Response Surface Methodology (RSM) dengan Historical Data pada Optimasi Proses Produksi Burger. *Jurnal Mutu Pangan*, 5(2).
- Priyanti, E., & Kurnianingsih, K. (2022). Pengaruh komposisi tepung sorgum dan tepung singkong terhadap penerimaan brownies muffin. *TEKNOBUGA: Jurnal Teknologi Busana dan Boga*, 10(1). <https://journal.unnes.ac.id/nju/index.php/teknobuga/article/view/31479>.
- Putri, N. A., Herlina, H., & Subagio, A. (2018). Karakteristik Mocaf (*Modified Cassava Flour*) berdasarkan metode penggilingan dan lama fermentasi. *Jurnal Agroteknologi*, 12(01), 79–89. <https://doi.org/10.19184/j-agt.v12i1.8252>.
- Qi, Y., Wang, W., Yang, T., Ding, W., & Xu, B. (2025). Maillard Reaction in Flour Product Processing: Mechanism, Impact on Quality, and Mitigation Strategies of Harmful Products. *Foods*, 14(15), 2721. <https://doi.org/10.3390/foods14152721>
- Rahayu, R. L., Mubarak, A. Z., & Istianah, N. (2021). Karakteristik fisikokimia cookies dengan variasi tepung sorgum dan pati jagung serta variasi margarin dan whey. *Jurnal Pangan dan Agroindustri*, 9(2), 89–99. <https://doi.org/10.21776/ub.jpa.2021.009.02.3>
- Rebellato, A.P., Orlando, E.A., Theodoropoulos, V.C.T. *et al.* Effect of phytase treatment of sorghum flour, an alternative for gluten free foods and bioaccessibility of essential minerals. *J Food Sci Technol* **57**, 3474–3481 (2020). <https://doi.org/10.1007/s13197-020-04382-w>
- Rimadiaz, S., Andriani, M., & Hasrulia, H. (2024). Strategi Inovatif UMKM Lula Pasta Dengan Keunggulan *Gluten-Free* Dengan Menggunakan Pendekatan Business Model Canvas (BMC). *Jurnal Sosial Teknologi*, 4(1), 38–47. <https://doi.org/10.59188/jurnalsostech.v4i1.1123>.
- Rosidah, Agustina, T., dan Paramita Octavianti. 2019. Kualitas Organoleptik Roti Manis Substitusi Tepung Jagung Kuning dengan Metode Penepungan Berbeda (Vol. 7, Issue 1).
- Salehi, F. (2019). Improvement of *gluten-free* bread and cake properties using natural hydrocolloids: A review. *Food Science & Nutrition*, 7(11), 3391–3402. <https://doi.org/10.1002/fsn3.1245>.
- Santos, F. G., Aguiar, E. V., Centeno, A. C. L. S., & Capriles, V. D. (2025). Optimization of *gluten-free* bread formulation using whole sorghum-based flour by response surface methodology. *Foods*, 14(17), 3113. <https://doi.org/10.3390/foods14173113>.

- Sari, F., Gusnita, W., Kasmita, & Anggraini, E. (2024). Penambahan tepung bengkuang terhadap kualitas bentuk, warna, aroma, tekstur dan rasa pada muffin. *Jurnal Pendidikan Tata Boga dan Teknologi*, 5(3), 440–444. <https://doi.org/10.24036/jptbt.v5i3.16539>
- Simanjuntak, R. R., Sulaeman, A., Moviana, Y., & Judiono, J. (2022). Snack Bar Sorgum dan Kacang Merah Rendah Indeks Glikemik sebagai Makanan Selingan Tinggi Serat Penderita Diabetes Melitus. *Jurnal Gizi dan Dietetik*, 1(2), 78–86. <https://doi.org/10.34011/jgd.v1i2.1246>.
- Subagio, A., Windrati, W. S., Witono, Y., & Fahmi, F. 2018. Produksi Operasi Standar (POS): Produksi Mocaf Berbasis Klaster. Fakultas Tekonologi Pertanian, Universitas Jember, Jember.
- Syam, A. F., Utari, A. P., Hasanah, N. H., Rizky, A., & Abdullah, M. (2024). Prevalence and factors associated with celiac disease in high-risk patients with functional gastrointestinal disorders. *PLOS ONE*, 19(6), e0297605. <https://doi.org/10.1371/journal.pone.0297605>
- Trifany, L. A. N., & Murtini, E. S. (2021). Optimization of soursop (*Annona muricata* L.) puree concentration and margarine on quality of muffins. *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 10(1).
- Tuhumury, H. C. D., Souripet, A., & Warlauw, M. (2020). *Karakteristik Muffin dengan Penambahan Puree Pisang Tongka Langit (Musa troglodytarum)*. AGRITEKNO: Jurnal Teknologi Pertanian, 9(2), 48–57.
- Tyas. A., Bahar. A., Suwardiah. D. K., dan Miranti. M. G. 2022. Komposisi Gizi dan Peluang Bisnis Dari Pemanfaatan Tepung Lokal Pada Kue Muffin. *Jurnal Tata Boga*. Universitas Negeri Surabaya. Surabaya.
- Van Rooyen, J., Oyeyinka, S. A., Manley, M., & Kidd, M. (2023). Wheat starch structure–function relationship in breadmaking: A review. *Comprehensive Reviews in Food Science and Food Safety*, 22(3), 2292–2315. <https://doi.org/10.1111/1541-4337.13147>
- Wahyono, A., Kang, W.-W., & Park, H.-D. (2015). Characterization and application of *Torulaspora delbrueckii* JK08 and *Pichia anomala* JK04 as baker's yeasts. *Journal of Food and Nutrition Research* (ISSN 1336-8672), 54(3), 205–217.
- Wahyono, A., Kurniawati, E. dan Kasutjianingati. 2017. Optimasi Senyawa Fungsional Tepung Labu Kuning dengan Response Surface Methodology (RSM) untuk Peningkatan Kualitas Roti Tawar. Jember
- Widiyani, W. P., & Arief, D. Z. (2019). Pengaruh jenis dan konsentrasi hidrokoloid (xanthan gum, guar gum, dan carboxy methyl cellulose) terhadap karakteristik muffin *gluten free* berbasis tepung sorgum (*Sorghum bicolor* (L.) Moench) (*Skripsi, Fakultas Teknik, Universitas Pasundan*).

Widyartha, G. N. A. Z., Sujayanti, L. G. T., Isabel, G., Soares, B., Arimurni, D. A. dan Wahyudi, M. D. P. S. 2020. Pendekatan *Simplex Lattice Design* pada Formulasi *Wound Dressing Gel Pentoxifylline* dengan Kombinasi Gelling Agent HPMC dan Chitosan. *Acta Holistica Pharmaciana*, 2(2), hal. 28–36.