

DAFTAR PUSTAKA

- Alam, M., Biswas, M., Ahmed, J., Hosain, M. A., Alam, A., Khan, M. H. H., & Molla, M. M. (2023). Physico-chemical properties, antioxidant activity and bioactive compounds in edible and non-edible portions of dragon fruit cultivars native to Bangladesh. *Food Research*, 7(4), 194–203. [https://doi.org/10.26656/FR.2017.7\(4\).243](https://doi.org/10.26656/FR.2017.7(4).243)
- Arkan, N. D., Setyawardani, T., & Astuti, T. Y. (2021). Pengaruh Penggunaan Pektin Nabati dengan Persentase yang Berbeda terhadap Nilai pH dan Total Asam Tertitiasi Yogurt Susu Sapi. *Jurnal Teknologi Hasil Peternakan*, 2(1), 1–7. <https://doi.org/10.24198/jthp.v2i1.28302>
- Aspri, M., Papademas, P., & Tsaltas, D. (2020). Review on Non-Dairy Probiotics and Their Use in Non-Dairy Based Products. *Fermentation*, 6(1), 1-20. <https://doi.org/10.3390/fermentation6010030>
- Balmori, V., Marnpae, M., Cgusak, C., Kamonsuwan, K., Katelakha, K., Charoensiddhi, S., & Adisakwattana. (2023). Enhancing Phytochemical Compounds, Functional Properties, and Volatile Flavor Profiles of Pomelo (*Citrus grandis* (L.) Osbeck) Juices from Different Cultivars through Fermentation with *Lactocaseibacillus paracasei*. *Foods*, 12(23), 4278. <https://doi.org/10.3390/foods12234278>
- Bintsis, T. (2018). Lactic acid bacteria as starter cultures: An update in their metabolism and genetics. *AIMS Microbiology*, 4(4), 665–684. <https://doi.org/10.3934/microbiol.2018.4.665>
- Brugnoni, L. I., Pezzutti, A., & Gonzalez, M. T. (2013). Effect of storage conditions on microbiological and physicochemical parameters of cloudy apple juice concentrate. *International Journal of Food Engineering*, 9(1), 67–74. <https://doi.org/10.1515/ijfe-2012-0156>
- Chatterjee, E., & GA Manuel, S. (2016). Effect of Fruit Pectin on Growth of Lactic Acid Bacteria. *Journal of Probiotics & Health*, 04(02), 4–7. <https://doi.org/10.4172/2329-8901.1000147>
- Chen, S. Y., Xu, C. Y., Mazhar, M. S., & Naiker, M. (2024). Nutritional Value and Therapeutic Benefits of Dragon Fruit: A Comprehensive Review with Implications for Establishing Australian Industry Standards. *Molecules*, 29(23), 1–32. <https://doi.org/10.3390/molecules29235676>
- Chen, Z., Zhong, B., Barrow, C. J., Dunshea, F. R., & Suleria, H. A. R. (2021). Identification of phenolic compounds in Australian grown dragon fruits by LC-ESI-QTOF-MS/MS and determination of their antioxidant potential. *Arabian Journal of Chemistry*, 14(6), 103151. <https://doi.org/10.1016/j.arabjc.2021.103151>
- Choo, K. Y., Kho, C., Ong, Y. Y., Thoo, Y. Y., Lim, R. L. H., Tan, C. P., & Ho, C. W. (2018). Studies on the storage stability of fermented red dragon fruit (*Hylocereus polyrhizus*) drink. *Food Science and Biotechnology*, 27(5), 1411–1417. <https://doi.org/10.1007/s10068-018-0367-4>
- Cui, Y., Wang, M., Zheng, Y., Miao, K., & Qu, X. (2021). The Carbohydrate Metabolism of *Lactiplantibacillus plantarum*. *International Journal of Molecular Sciences*, 22(24), 13452. <https://doi.org/10.3390/ijms222413452>
- Dasaesamoh, R., Youravong, W., & Wichienchot, S. (2016). Digestibility, Fecal Fermentation and Anti-Cancer of Dragon Fruit Oligosaccharides. *International Food Research Journal*, 23(6), 2581–2587.
- Dimidi, E., Cox, S. R., Rossi, M., & Whelan, K. (2019). Fermented foods: Definitions

- and characteristics, impact on the gut microbiota and effects on gastrointestinal health and disease. *Nutrients*, 11(8), 1806. <https://doi.org/10.3390/nu11081806>
- Du, H., Olawuyi, I. F., Said, N. S., & Lee, W. Y. (2024). Comparative Analysis of Physicochemical and Functional Properties of Pectin from Extracted Dragon Fruit Waste by Different Techniques. *Polymers*, 16(8). <https://doi.org/10.3390/polym16081097>
- Eveline, & Audina, M. (2019). Utilization of super red dragon fruit peel (*Hylocereus Costaricensis* (F.A.C. Weber) Britton & Rose) in the making of fermented beverage. *IOP Conference Series: Earth and Environmental Science*, 292(1), 1-9. <https://doi.org/10.1088/1755-1315/292/1/012037>
- Ferreira, R. M., Costa, A. M., Pinto, C. A., Silva, A. M. S., Saraiva, J. A., & Cardoso, S. M. (2023). Impact of Fermentation and Pasteurization on the Physico-Chemical and Phytochemical Composition of *Opuntia ficus-indica* Juices. *Foods*, 12(11), 2096. <https://doi.org/10.3390/foods12112096>
- Ghafari, S., & Ansari, S. (2018). Microbial viability, physico-chemical properties and sensory evaluation of pineapple juice enriched with *Lactobacillus casei*, *Lactobacillus rhamnosus* and inulin during refrigerated storage. *Journal of Food Measurement and Characterization*, 12(4), 2927–2935. <https://doi.org/10.1007/s11694-018-9908-z>
- Ghorband, A., Joshi, B., & Bhatt, H. (2023). Studies on physicochemical and nutritional properties of dragon fruit (*Hylocereus polyrhizus*). *Journal of Pharmacognosy and Phytochemistry*, 12(6), 223–226. <https://doi.org/10.22271/phyto.2023.v12.i6c.14785>
- Haile, M., & Kang, W. H. (2019). Isolation, identification, and characterization of pectinolytic yeasts for starter culture in coffee fermentation. *Microorganisms*, 7(10). <https://doi.org/10.3390/microorganisms7100401>
- Hashemi, S. M. B., Mousavi Khaneghah, A., Barba, F. J., Nemati, Z., Sohrabi Shokofti, S., & Alizadeh, F. (2017). Fermented sweet lemon juice (*Citrus limetta*) using *Lactobacillus plantarum* LS5: Chemical composition, antioxidant and antibacterial activities. *Journal of Functional Foods*, 38, 409–414. <https://doi.org/10.1016/j.jff.2017.09.040>
- Herawati, N., Sukatiningsih, & Windrati, W. S. (2012). Pembuatan Minuman Fungsional Berbasis Ekstrak Kulit Buah Naga Merah (*Hylocereus polyrhizus*), Rosela (*Hibiscus sabdariffa* L.) dan Buah Salam (*Syzygium polyanthum wigh walp*). *Agrotek*, 6(1), 40-50.
- Herbach, K. M., Stintzing, F. C., & Carle, R. (2006). Betalain stability and degradation - Structural and chromatic aspects. *Journal of Food Science*, 71(4), 41–50. <https://doi.org/10.1111/j.1750-3841.2006.00022.x>
- Ho, P. L., Tran, D. T., Hertog, M. L. A. T. M., & Nicolaï, B. M. (2021). Effect of controlled atmosphere storage on the quality attributes and volatile organic compounds profile of dragon fruit (*Hylocereus undatus*). *Postharvest Biology and Technology*, 173(5), 111406. <https://doi.org/10.1016/j.postharvbio.2020.111406>
- Huan, P. T., Hien, N. M., & Anh, N. H. T. (2020). Optimization of alcoholic fermentation of dragon fruit juice using response surface methodology. *Food Research*, 4(5), 1529–1536. [https://doi.org/10.26656/fr.2017.4\(5\).125](https://doi.org/10.26656/fr.2017.4(5).125)
- Hussain, H., Mamadelieva, N., Hussain, A., Hassan, U., Rabnawaz, A., Ahmed, I., & Green, I. R. (2022). Fruit Peels: Food Waste as a Valuable Source of Bioactive Natural Products for Drug Discovery. *Current Issues in Molecular Biology*, 44(5), 1960-1994. <https://doi.org/10.3390/cimb44050134>

- Kakade, V., Jinger, D., Dayal, V., Chavan, S., D, N. D., & C, W. G. (2020). Dragon Fruit: Wholesome and remunerative fruitcrop for India. *Food and Scientific Reports*, 1(12), 44–48.
- Kaprasob, R., Kerdchoechuen, O., Laohakunjit, N., Thumthanaruk, B., & Shetty, K. (2018). Changes in physico-chemical, astringency, volatile compounds and antioxidant activity of fresh and concentrated cashew apple juice fermented with *Lactobacillus plantarum*. *Journal of Food Science and Technology*, 55(10), 3979–3990. <https://doi.org/10.1007/s13197-018-3323-7>
- Kardas, M., Kiciak, A., Szydal, K., Sitkiewicz, B., Staskiewicz-Bartecka, W., & Bielaszka, A. (2024). Assessment of the color of orange juice in the context of dietitians' food preferences. *Frontiers in Nutrition*, 10, 1328795. <https://doi.org/10.3389/fnut.2023.1328795>
- Kusumiyati, Hadiwijaya, Y., Putri, I. E., Mubarak, S., & Hamdani, J. S. (2020). Rapid and non-destructive prediction of total soluble solids of guava fruits at various storage periods using handheld near-infrared instrument. *IOP Conference Series: Earth and Environmental Science*, 458(1), 1–6. <https://doi.org/10.1088/1755-1315/458/1/012022>
- Kwaw, E., Ma, Y., Tchabo, W., Apaliya, M. T., Wu, M., Sackey, A. S., Xiao, L., & Tahir, H. E. (2018). Effect of *Lactobacillus* strains on phenolic profile, color attributes and antioxidant activities of lactic-acid-fermented mulberry juice. *Food Chemistry*, 250, 148–154. <https://doi.org/10.1016/j.foodchem.2018.01.009>
- Laksono, B. A., Rif'at, N. A., Arsyah, T. 'Afiy, Hanifah, E. A., Astuti, E. W., Rkhmawati, H. R., Cahyani, C. D., Najwa, H., Adyatama, A. Y., Septiyani, D., Rachman, Z. I., Kirana, A. R. M., Purnomo, A. T., & Sari, R. (2023). Evaluation of Oral Preparations of Vitamin E as Antioxidant Using DPPH Method (*Diphenyl picrylhydrazyl*). *Berkala Ilmiah Kimia Farmasi*, 10(1), 13–17. <https://doi.org/10.20473/bikfar.v10i1.47115>
- Lascano, R. A., Gan, M. G. L. D., Sulabo, A. S. L., Santiago, D. M. O., Ancheta, L. B., & Zubia, C. S. (2020). Physico-chemical properties, probiotic stability and sensory characteristics of *Lactobacillus plantarum* S20 – supplemented passion fruit (*Passiflora edulis* f. *flavicarpa* Deg.) juice powder. *Food Research*, 4(2), 320–326. [https://doi.org/10.26656/fr.2017.4\(2\).295](https://doi.org/10.26656/fr.2017.4(2).295)
- Le, N. L. (2022). Functional compounds in dragon fruit peels and their potential health benefits: a review. *International Journal of Food Science and Technology*, 57(5), 2571–2580. <https://doi.org/10.1111/ijfs.15111>
- Li, H., Huang, J., Wang, Y., Wang, X., Ren, Y., Yue, T., & Wang, Z. (2021). Study on the nutritional characteristics and antioxidant activity of dealcoholized sequentially fermented apple juice with *Saccharomyces cerevisiae* and *Lactobacillus plantarum* fermentation. *Food Chemistry*, 363, 130351. <https://doi.org/10.1016/j.foodchem.2021.130351>
- Li, X., Zhang, Z. H., Qiao, J., Qu, W., Wang, M. S., Gao, X., Zhang, C., Brennan, C. S., & Qi, X. (2022). Improvement of betalains stability extracted from red dragon fruit peel by ultrasound-assisted microencapsulation with maltodextrin. *Ultrasonics Sonochemistry*, 82, 105897. <https://doi.org/10.1016/j.ultsonch.2021.105897>
- Li, Z., Teng, J., Lyu, Y., Hu, X., Zhao, Y., & Wang, M. (2019). Enhanced antioxidant activity for apple juice fermented with *Lactobacillus plantarum* ATCC14917. *Molecules*, 24(1), 1–12. <https://doi.org/10.3390/molecules24010051>
- Lim, T. W., Lim, R. L. H., Pui, L. P., Tan, C. P., & Ho, C. W. (2025). Red Dragon Fruit

- (*Hylocereus polyrhizus*), a Superfruit Rich in Betacyanins Pigments with Antioxidative Potential for Hepatoprotection: A Review. *Future Foods*, 11, 1-19. <https://doi.org/10.1016/j.fufo.2025.100562>
- Liu, Y., Chen, H., Chen, W., Zhong, Q., Zhang, G., & Chen, W. (2018). Beneficial Effects of Tomato Juice Fermented by *Lactobacillus plantarum* and *Lactobacillus casei*: Antioxidation, Antimicrobial Effect, and Volatile Profiles. *Molecules*, 23(9), 1–18. <https://doi.org/10.3390/molecules23092366>
- Manoj, P. M., Mohan, J. R., Khasherao, B. Y., Shams, R., & Dash, K. K. (2023). Fruit based probiotic functional beverages: A review. *Journal of Agriculture and Food Research*, 14, 100729. <https://doi.org/10.1016/j.jafr.2023.100729>
- Markovic, I., Ilic, J., Markovic, D., Simonovic, V., & Kosanic, N. (2013). Color Measurement of Food Products using CIE L * a * b * and RGB Color Space. *Journal of Hygienic Engineering and Design*, 4, 50–53.
- Melini, F., & Melini, V. (2021). Impact of fermentation on phenolic compounds and antioxidant capacity of quinoa. *Fermentation*, 7(1), 1–19. <https://doi.org/10.3390/fermentation7010020>
- Mihafu, F. D., Issa, J. Y., & Kamiyango, M. W. (2020). Implication of Sensory Evaluation and Quality Assessment in Food Product Development: a Review. *Current Research in Nutrition and Food Science*, 8(3), 690–702. <https://doi.org/10.12944/CRNFSJ.8.3.03>
- Miszczak, I., Tańska, M., Rejmer, W., Konopka, I., & Zielińska, M. (2024). Spontaneous Fermentation of Beetroot – Effect of Fermentation Time and Temperature and Slice Thickness on Leaven Quality. *Polish Journal of Food and Nutrition Sciences*, 74(3), 255–267. <https://doi.org/10.31883/pjfn/192122>
- Nafisah, R. F., Shofiyya, A. N., Agustina, E., Lusiana, N., & Purnamasari, R. (2023). The effect of fermentation time on phenolic levels of vanilla (*Vanilla planifolia*) leaf kombucha tea. *The 3rd International Conference on Sustainable Health Promotion (ICOSHPRO)*, 3(1), 212–221.
- Ninga, K. A., Desobgo, Z. S. C., De, S., & Nso, E. J. (2021). Pectinase hydrolysis of guava pulp: effect on the physicochemical characteristics of its juice. *Heliyon*, 7(10), 1–11. <https://doi.org/10.1016/j.heliyon.2021.e08141>
- Rahayu, W. P., & Nurwitri, CC. (2021). *Mikrobiologi Pangan: Edisi Revisi*. Bogor: PT Penerbit IPB Press.
- Rahayuningsih, E., Setiawan, F. A., Rahman, A. B. K., Siahaan, T., & Petrus, H. T. B. M. (2021). Microencapsulation of betacyanin from red dragon fruit (*Hylocereus polyrhizus*) peels using pectin by simple coacervation to enhance stability. *Journal of Food Science and Technology*, 58(9), 3379–3387. <https://doi.org/10.1007/s13197-020-04910-8>
- Ranadheera, C. S., Vidanarachchi, J. K., Rocha, R. S., Cruz, A. G., & Ajlouni, S. (2017). Probiotic Delivery through Fermentation: Dairy vs. Non-Dairy Beverages. *Fermentation*, 3(4), 1-17. <https://doi.org/10.3390/fermentation3040067>
- Rios-Corripio, G., & Guerrero-Beltrán, J. Á. (2019). Antioxidant and physicochemical characteristics of unfermented and fermented pomegranate (*Punica granatum* L.) beverages. *Journal of Food Science and Technology*, 56(1), 132–139. <https://doi.org/10.1007/s13197-018-3466-6>
- Riswanda, B. A. F., Basuki, E., & Yasa, I. wayan S. (2024). Pengaruh Kombinasi Kulit Buah Naga Merah (*Hylocereus polyrhizus*) dan Buah Sirsak (*Annona muricata*) terhadap Komponen Mutu Selai. *EduFood*, 2(1), 35–46.
- Rizal, S., Udayana Nurdin, S., Suharyono, & Marniza. (2020). Kajian Potensi Sari

- Kulit Buah Nanas yang difermentasi dengan *Lactobacillus casei* Sebagai Minuman Probiotik Secara In Vivo. *Jurnal Agroindustri*, 10(1), 12–20. <https://ejournal.unib.ac.id/index.php/agroindustri>
- Rizqiati, H., Ramadhanti, D. L., & Prayoga, M. I. Y. (2021). Pengaruh Variasi Konsentrasi Sukrosa Terhadap Total Bakteri Asam Laktat, pH, Kadar Alkohol dan Hedonik Water Kefir Belimbing Manis (*Averrhoa carambola*). *Jurnal Ilmiah Sains*, 21(1), 54. <https://doi.org/10.35799/jis.21.1.2021.31160>
- Rodriguez, E. B., Vidallon, M. L. P., Mendoza, D. J. R., Dalisay, K. A. M., & Reyes, C. T. (2015). Stabilization of betalains from the peel of red dragon fruit [*Hylocereus polyrhizus* (Weber) Britton & Rose] through biopolymeric encapsulation. *Philippine Agricultural Scientist*, 98(4), 276–286.
- Sari, S. G., & Mangkurat, U. L. (2018). Komposisi Kandungan Gula Buah Naga *Hylocereus costaricensis*. *Borneo Jurnal Pharmascientech*, 01, 1–9.
- Savaiano, D. A., & Hutkins, R. W. (2021). Yogurt, cultured fermented milk, and health: A systematic review. *Nutrition Reviews*, 79(5), 599–614. <https://doi.org/10.1093/nutrit/nuaa013>
- Sawicki, T., Martinez-Villaluenga, C., Frias, J., Wiczowski, W., Peñas, E., Bączek, N., & Zieliński, H. (2019). The effect of processing and in vitro digestion on the betalain profile and ACE inhibition activity of red beetroot products. *Journal of Functional Foods*, 55, 229–237. <https://doi.org/10.1016/j.jff.2019.01.053>
- Sen, A., Manuel, S. GA., Kale, R. D. (2014). Fruit Waste Pectin in Enhancing the Establishment of Lactic Acid Bacteria. *Journal of Nutritional Health & Food Engineering*, 1(3), 124-126. <https://doi.org/10.15406/jnhfe.2014.01.00018>
- Singh, A., Swami, S., Panwar, N. R., Kumar, M., Shukla, A. K., Roupael, Y., Sabatino, L., & Kumar, P. (2022). Development Changes in the Physicochemical Composition and Mineral Profile of Red-Fleshed Dragon Fruit Grown under Semi-Arid Conditions. *Agronomy*, 12(2). <https://doi.org/10.3390/agronomy12020355>
- Skalicky, M., Kubes, J., Shokoofeh, H., Tahjib-Ul-Arif, M., Vachova, P., & Hejnak, V. (2020). Betacyanins and Betaxanthins in Cultivated Varieties of *Beta vulgaris* L. Compared to Weed Beets. *Molecules*, 25(22), 1–15. <https://doi.org/10.3390/molecules25225395>
- Sultan, R. A., Lahming, L., & Sukainah, A. (2022). Karakteristik Minuman Probiotik Kombinasi Sari Buah Nenas (*Ananas comosus* L.) dan Pepaya (*Carica papaya* L.). *Jurnal Pendidikan Teknologi Pertanian*, 8(1), 37–46. <https://doi.org/10.26858/jptp.v8i1.21344>
- Szutowska, J. (2020). Functional properties of lactic acid bacteria in fermented fruit and vegetable juices: a systematic literature review. *European Food Research and Technology*, 246(3), 357–372. <https://doi.org/10.1007/s00217-019-03425-7>
- Tang, Z., Zhao, Z., Chen, S., Lin, W., Wang, Q., Shen, N., Qin, Y., Xiao, Y., Chen, H., Chen, H., Bu, T., Li, Q., Yao, H., & Yuan, M. (2023). Dragon fruit-kiwi fermented beverage: In vitro digestion, untargeted metabolome analysis and anti-aging activity in *Caenorhabditis elegans*. *Frontiers in Nutrition*, 9, 1-15. <https://doi.org/10.3389/fnut.2022.1052818>
- Vivek, K., Mishra, S., & Pradhan, R. C. (2020). Characterization of spray dried probiotic Sohiong fruit powder with *Lactobacillus plantarum*. *Lwt*, 117, 108699. <https://doi.org/10.1016/j.lwt.2019.108699>
- Vivek, K., Mishra, S., Pradhan, R. C., & Jayabalan, R. (2019). Effect of probiotification

- with *Lactobacillus plantarum* MCC 2974 on quality of Sohiong juice. *Lwt*, *108*, 55–60. <https://doi.org/10.1016/j.lwt.2019.03.046>
- Wichienchot, S., Jatupornpipat, M., & Rastall, R. A. (2010). Oligosaccharides of pitaya (dragon fruit) flesh and their prebiotic properties. *Food Chemistry*, *120*(3), 850–857. <https://doi.org/10.1016/j.foodchem.2009.11.026>
- Wu, D., Xia, Q., Cheng, H., Zhang, Q., Wang, Y., & Ye, X. (2022). Changes of Volatile Flavor Compounds in Sea Buckthorn Juice during Fermentation Based on Gas Chromatography-Ion Mobility Spectrometry. *Foods*, *11*(21), 1-18. <https://doi.org/10.3390/foods11213471>
- Yu, A. O., Wei, L., & Marco, M. L. (2022). Calcium Determines *Lactiplantibacillus plantarum* Competitive Fitness. *Applied and Environmental Microbiology*, *88*(15), 1-14. <https://doi.org/10.1128/aem.00666-22>
- Yuan, X., Wang, T., Sun, L., Qiao, Z., Pan, H., Zhong, Y., & Zhuang, Y. (2024). Recent advances of fermented fruits: A review on strains, fermentation strategies, and functional activities. *Food Chemistry: X*, *22*, 101382. <https://doi.org/10.1016/j.fochx.2024.101482>
- Zahid, H. F., Ranadheera, C. S., Fang, Z., & Ajlouni, S. (2021). Utilization of Mango, Apple and Banana Fruit Peels as Prebiotic and Functional Ingredients. *Agriculture*, *11*(7), 584. <https://doi.org/10.3390/agriculture11070584>
- Zehiroglu, C., & Ozturk Sarikaya, S. B. (2019). The importance of antioxidants and place in today's scientific and technological studies. *Journal of Food Science and Technology*, *56*(11), 4757–4774. <https://doi.org/10.1007/s13197-019-03952-x>
- Zhang, C., Ada Khoo, S. L., Chen, X. D., & Quek, S. Y. (2020). Microencapsulation of fermented noni juice via micro-fluidic-jet spray drying: Evaluation of powder properties and functionalities. *Powder Technology*, *361*, 995–1005. <https://doi.org/10.1016/j.powtec.2019.10.098>
- Zheng, X., Yu, Y., Xiao, G., Xu, Y., Wu, J., Tang, D., & Zhang, Y. (2014). Comparing product stability of probiotic beverages using litchi juice treated by high hydrostatic pressure and heat as substrates. *Innovative Food Science and Emerging Technologies*, *23*, 61–67. <https://doi.org/10.1016/j.ifset.2014.01.013>
- Zhou, Y., Wang, R., Zhang, Y., Yang, Y., Sun, X., Zhang, Q., & Yang, N. (2020). Biotransformation of phenolics and metabolites and the change in antioxidant activity in kiwifruit induced by *Lactobacillus plantarum* fermentation. *Journal of the Science of Food and Agriculture*, *100*(8), 3283–3290. <https://doi.org/10.1002/jsfa.10272>