

## REFERENCES

- Abarquero, D., Bodelón, R., Flórez, A. B., Fresno, J. M., Renes, E., Mayo, B., & Tornadijo, M. E. (2023). Technological and safety assessment of selected lactic acid bacteria for cheese starter cultures design: Enzymatic and antimicrobial activity, antibiotic resistance and biogenic amine production. *LWT*, *180*, 114709. <https://doi.org/10.1016/j.lwt.2023.114709>
- Akhtar, S., Ismail, T., Layla, A., Hussain, M., & Qamar, M. (2022). An Overview of Plant-Based Protein Rich Products. In A. Manickavasagan, L.-T. Lim, & A. Ali (Eds.), *Plant Protein Foods* (pp. 27–60). Springer International Publishing. [https://doi.org/10.1007/978-3-030-91206-2\\_2](https://doi.org/10.1007/978-3-030-91206-2_2)
- Anumudu, C. K., Miri, T., & Onyeaka, H. (2024). Multifunctional Applications of Lactic Acid Bacteria: Enhancing Safety, Quality, and Nutritional Value in Foods and Fermented Beverages. *Foods*, *13*(23), 3714. <https://doi.org/10.3390/foods13233714>
- AOAC. (2000). *Association of Official Analytical Chemistry* (17th ed.). The Association of Official Analytical Chemists.
- Arab, M., Yousefi, M., Khanniri, E., Azari, M., Ghasemzadeh-Mohammadi, V., & Mollakhalili-Meybodi, N. (2023). A comprehensive review on yogurt syneresis: Effect of processing conditions and added additives. *Journal of Food Science and Technology*, *60*(6), 1656–1665. <https://doi.org/10.1007/s13197-022-05403-6>
- Arkanit, K., Senphan, T., Issapap, N., Mungmueang, N., Sriket, P., Benjakul, S., & Sriket, C. (2025). Physicochemical properties and bioavailability of bio-calcium products from tilapia bone: A comparative study with synthetic hydroxyapatite. *Journal of Agriculture and Food Research*, *19*, 101708. <https://doi.org/10.1016/j.jafr.2025.101708>
- Azis, A., Izzati, M., & Haryanti, S. (2015). Aktivitas Antioksidan Dan Nilai Gizi Dari Beberapa Jenis Beras Dan Millet Sebagai Bahan Pangan Fungsional Indonesia. *Jurnal Akademika Biologi*. <https://ejournal3.undip.ac.id/index.php/biologi/article/view/19400>
- Bernat, N., Cháfer, M., Chiralt, A., & González-Martínez, C. (2013). Vegetable milks and their fermented derivative products. *International Journal of Food Studies*, *3*(1). <https://doi.org/10.7455/ijfs/3.1.2014.a9>
- Carbonaro, M., Maselli, P., & Nucara, A. (2015). Structural aspects of legume proteins and nutraceutical properties. *Food Research International*, *76*, 19–30. <https://doi.org/10.1016/j.foodres.2014.11.007>
- Chandan, R. C., & Kilara, A. (Eds.). (2013). *Manufacturing yogurt and fermented milks* (Second edition). Wiley-Blackwell.
- Chen, L., Guo, Y., Li, X., Gong, K., & Liu, K. (2021). Phenolics and related in vitro functional activities of different varieties of fresh waxy corn: A whole grain. *BMC Chemistry*, *15*(1), 14. <https://doi.org/10.1186/s13065-021-00740-7>



- Chen, W., Xie, C., He, Q., Sun, J., & Bai, W. (2023). Improvement in color expression and antioxidant activity of strawberry juice fermented with lactic acid bacteria: A phenolic-based research. *Food Chemistry: X*, *17*, 100535. <https://doi.org/10.1016/j.fochx.2022.100535>
- Damin, M. R., Minowa, E., Alcântara, M. R., & Oliveira, M. N. (2008). EFFECT OF COLD STORAGE ON CULTURE VIABILITY AND SOME RHEOLOGICAL PROPERTIES OF FERMENTED MILK PREPARED WITH YOGURT AND PROBIOTIC BACTERIA. *Journal of Texture Studies*, *39*(1), 40–55. <https://doi.org/10.1111/j.1745-4603.2007.00129.x>
- D'Andrea, A. E., Kinchla, A. J., & Nolden, A. A. (2023). A comparison of the nutritional profile and nutrient density of commercially available plant-based and dairy yogurts in the United States. *Frontiers in Nutrition*, *10*, 1195045. <https://doi.org/10.3389/fnut.2023.1195045>
- De Souza, M., Drunkler, D. A., & Colla, E. (2023). Probiotic Functional Yogurt: Challenges and Opportunities. *Fermentation*, *10*(1), 6. <https://doi.org/10.3390/fermentation10010006>
- Denkova, Z., Filipov, E., Goranov, B., Dobrev, I., & Yanakieva, V. (2015). Yogurts Enriched with Pea Protein. *Food and Environment Safety Journal*, *14*(1), 7–14.
- Dhakal, D., Younas, T., Bhusal, R. P., Devkota, L., Henry, C. J., & Dhital, S. (2023). Design rules of plant-based yoghurt-mimic: Formulation, functionality, sensory profile and nutritional value. *Food Hydrocolloids*, *142*, 108786. <https://doi.org/10.1016/j.foodhyd.2023.108786>
- Eris, F. R., Riziani, D., Pamela, V. Y., Febriansah, M. R., Kusumasari, S., & Sari, A. K. (2023). A Review of the Potential of Beneng Taro as Material for Inulin Making and Its Application to Yogurt. In N. Huda, I. Jaswir, Y. Romdhonah, A. Alimuddin, T. Ahamed, & N. Nasser (Eds.), *Proceedings of the 2nd International Conference for Smart Agriculture, Food, and Environment (ICSAFE 2021)* (pp. 37–44). Atlantis Press International BV. [https://doi.org/10.2991/978-94-6463-090-9\\_5](https://doi.org/10.2991/978-94-6463-090-9_5)
- FAO/WHO. (2002). *Guidelines for the Evaluation of Probiotics in Food* [Report of a joint FAO/WHO working group on drafting guidelines for the evaluation of probiotics in food, London Ontario, Canada, April 30 and May 1, 2002]. FAO/WHO.
- GlobeNewswire. (2024). *Plant Based Food Market Surges to USD 85 Billion by 2030, Reflecting an 9.95% Growth | MarketDigits*. GlobeNewswire. <https://www.globenewswire.com/news-release/2024/02/12/2827392/0/en/Plant-Based-Food-Market-Surges-to-USD-85-Billion-by-2030-Reflecting-an-9-95-Growth-MarketDigits.html>
- Gupta, M. K., Viejo, C. G., Fuentes, S., Torrico, D. D., Saturno, P. C., Gras, S. L., Dunshea, F. R., & Cottrell, J. J. (2022). Digital technologies to assess yoghurt quality traits and consumers acceptability. *Journal of the Science of Food and Agriculture*, *102*(13), 5642–5652. <https://doi.org/10.1002/jsfa.11911>



- Hadjimbei, E., Botsaris, G., & Chrysostomou, S. (2022). Beneficial Effects of Yoghurts and Probiotic Fermented Milks and Their Functional Food Potential. *Foods*, 11(17), 2691. <https://doi.org/10.3390/foods11172691>
- Hsia, S.-Y., Hsiao, Y.-H., Li, W.-T., & Hsieh, J.-F. (2016). Aggregation of soy protein-isoflavone complexes and gel formation induced by glucono- $\delta$ -lactone in soymilk. *Scientific Reports*, 6(1), 35718. <https://doi.org/10.1038/srep35718>
- Jamalullail, N. A., Chan, Y. L., Tang, T. K., Tang, C. P., & Lai, O. M. (2022). NUTRITIONAL, PHYSICO-CHEMICAL STABILITY, MICROBIAL SURVIVABILITY AND SENSORIAL EVALUATION OF LEGUME YOGURTS. *Journal of Microbiology, Biotechnology and Food Sciences*, e5141. <https://doi.org/10.55251/jmbfs.5141>
- Jaywant, S. A., Singh, H., & Arif, K. M. (2022). Sensors and Instruments for Brix Measurement: A Review. *Sensors*, 22(6), 2290. <https://doi.org/10.3390/s22062290>
- Kizzie-Hayford, N., Jaros, D., Zahn, S., & Rohm, H. (2016). Effects of protein enrichment on the microbiological, physicochemical and sensory properties of fermented tiger nut milk. *LWT*, 74, 319–324. <https://doi.org/10.1016/j.lwt.2016.07.067>
- Klost, M., Giménez-Ribes, G., & Drusch, S. (2020). Enzymatic hydrolysis of pea protein: Interactions and protein fractions involved in fermentation induced gels and their influence on rheological properties. *Food Hydrocolloids*, 105, 105793. <https://doi.org/10.1016/j.foodhyd.2020.105793>
- Krebs, L., Bérubé, A., Jung, J., Marciniak, A., Turgeon, S. L., & Brisson, G. (2021). Impact of Ultra-High-Pressure Homogenization of Buttermilk for the Production of Yogurt. *Foods*, 10(8), 1757. <https://doi.org/10.3390/foods10081757>
- Kumari, M., Kokkiligadda, A., Dasriya, V., & Naithani, H. (2022). Functional relevance and health benefits of soymilk fermented by lactic acid bacteria. *Journal of Applied Microbiology*, 133(1), 104–119. <https://doi.org/10.1111/jam.15342>
- Laird, E., Molloy, A. M., McNulty, H., Ward, M., McCarroll, K., Hoey, L., Hughes, C. F., Cunningham, C., Strain, J. J., & Casey, M. C. (2017). Greater yogurt consumption is associated with increased bone mineral density and physical function in older adults. *Osteoporosis International*, 28(8), 2409–2419. <https://doi.org/10.1007/s00198-017-4049-5>
- Lee, T. C., Mohd Pu'ad, N. A. S., Alipal, J., Muhamad, M. S., Basri, H., Idris, M. I., & Abdullah, H. Z. (2022). Tilapia wastes to valuable materials: A brief review of biomedical, wastewater treatment, and biofuel applications. *Materials Today: Proceedings*, 57, 1389–1395. <https://doi.org/10.1016/j.matpr.2022.03.174>
- Limsitthichaikoon, S., Khampaenjiraroach, B., Saodaeng, K., Rimdusit, T., & Thapphasaraphong, S. (2014). Quality evaluation of purple waxy corn cobs

- for health use. *Journal of Asian Association of Schools of Pharmacy*, 3, 326–332.
- Liu, R., Frederiksen, C. P., Rasmussen, T. R., Bakalis, S., Jensen, P. E., Rudić, S., Bordallo, H. N., & Gouseti, O. (2025). Effect of Heat Treatment on the Molecular and Functional Properties of Pea Protein Isolate. *Food Biophysics*, 20(2), 64. <https://doi.org/10.1007/s11483-025-09954-x>
- Mani-López, E., Palou, E., & López-Malo, A. (2014). Probiotic viability and storage stability of yogurts and fermented milks prepared with several mixtures of lactic acid bacteria. *Journal of Dairy Science*, 97(5), 2578–2590. <https://doi.org/10.3168/jds.2013-7551>
- Marcus, R. T. (1998). The Measurement of Color. In *AZimuth* (Vol. 1, pp. 31–96). Elsevier. [https://doi.org/10.1016/S1387-6783\(98\)80005-6](https://doi.org/10.1016/S1387-6783(98)80005-6)
- Marlapati, L., Basha, R. F. S., Navarre, A., Kinchla, A. J., & Nolden, A. A. (2024). Comparison of Physical and Compositional Attributes between Commercial Plant-Based and Dairy Yogurts. *Foods*, 13(7), 984. <https://doi.org/10.3390/foods13070984>
- Matela, K. S., Pillai, M. K., & Thamae, T. (2019). Evaluation of pH, titratable acidity, syneresis and sensory profiles of someyoghurt samples from the Kingdom of Lesotho. *Food Research*, 693–697. [https://doi.org/10.26656/fr.2017.3\(6\).177](https://doi.org/10.26656/fr.2017.3(6).177)
- Mathews, A., Tangirala, A. D. S., Thirunavookarasu S, N., Kumar, S., Anandharaj, A., & Rawson, A. (2023). Extraction and modification of protein from sesame oil cake by the application of emerging technologies. *Food Chemistry Advances*, 2, 100326. <https://doi.org/10.1016/j.focha.2023.100326>
- Meybodi, N. M., Mortazavian, A. M., Arab, M., & Nematollahi, A. (2020). Probiotic viability in yoghurt: A review of influential factors. *International Dairy Journal*, 109, 104793. <https://doi.org/10.1016/j.idairyj.2020.104793>
- Ministry of Public Health, Thailand. (2013). *Announcement of the Ministry of Public Health (No. 353) B.E. 2556 Regarding Fermented Milk (No. 353)*. Thai FDA.
- Ministry of Public Health, Thailand. (2023). *Notification of the Ministry of Public Health (No. 447) B.E. 2566 (2023) Re: Health Claims Made on Food Labelling (No. 447)*. Thai FDA.
- Mohamed, G., Lertrat, K., & Suriharn, B. (2016). Yield and yield components of purple waxy corn grown under different locations in Thailand. *วารสารแก่นเกษตร*, 44(1), Article 1.
- Mohammadi, H., Ghavami, A., Faghihimani, Z., Sharifi, S., Nattagh-Eshtivani, E., Ziaei, R., & Miraghajani, M. (2021). Effects of probiotics fermented milk products on obesity measure among adults: A systematic review and meta-analysis of clinical trials. *Journal of Functional Foods*, 82, 104494. <https://doi.org/10.1016/j.jff.2021.104494>
- Montemurro, M., Pontonio, E., Coda, R., & Rizzello, C. G. (2021). Plant-Based Alternatives to Yogurt: State-of-the-Art and Perspectives of New

- Biotechnological Challenges. *Foods*, 10(2), 316. <https://doi.org/10.3390/foods10020316>
- Naissinger Da Silva, M., Tagliapietra, B. L., Flores, V. D. A., & Pereira Dos Santos Richards, N. S. (2021). In vitro test to evaluate survival in the gastrointestinal tract of commercial probiotics. *Current Research in Food Science*, 4, 320–325. <https://doi.org/10.1016/j.crfs.2021.04.006>
- Nikoo, M., Regenstein, J. M., & Yasemi, M. (2023). Protein Hydrolysates from Fishery Processing By-Products: Production, Characteristics, Food Applications, and Challenges. *Foods*, 12(24), 4470. <https://doi.org/10.3390/foods12244470>
- Oliás, R., Delgado-Andrade, C., Padial, M., Marín-Manzano, M. C., & Clemente, A. (2023). An Updated Review of Soy-Derived Beverages: Nutrition, Processing, and Bioactivity. *Foods*, 12(14), 2665. <https://doi.org/10.3390/foods12142665>
- Oselu, S., Ebere, R., Huka, G., Musalia, L., Marete, E., Mathara, J. M., Mwobobia, F., & Arimi, J. M. (2022). Production and characterisation of camel milk yoghurt containing different types of stabilising agents. *Heliyon*, 8(11), e11816. <https://doi.org/10.1016/j.heliyon.2022.e11816>
- Peng, Y., Kyriakopoulou, K., Keppler, J. K., Venema, P., & Van Der Goot, A. J. (2022). Effect of calcium enrichment on the composition, conformation, and functional properties of soy protein. *Food Hydrocolloids*, 123, 107191. <https://doi.org/10.1016/j.foodhyd.2021.107191>
- Peters, O. O., Afolabi, M. O., & Makinde, F. M. (2023). Chemical, physicochemical and sensory properties of yoghurt and yoghurt simulates produced from the blends of cow milk and coconut milk. *IOP Conference Series: Earth and Environmental Science*, 1219(1), 012020. <https://doi.org/10.1088/1755-1315/1219/1/012020>
- Petsong, K., Kaewthong, P., Kingwascharapong, P., Nilswan, K., Karnjanapratum, S., & Tippayawat, P. (2023). Potential of jackfruit inner skin fibre for encapsulation of probiotics on their stability against adverse conditions. *Scientific Reports*, 13(1), 11158. <https://doi.org/10.1038/s41598-023-38319-y>
- Petsong, K., Yarnpakdee, S., Senphan, T., Sriket, C., Kingwascharapong, P., Moula Ali, A. M., Surya, R., & Karnjanapratum, S. (2024). Impact of Bio-calcium from Nile Tilapia Bone as a Supporting Material on the Stability Enhancement of Immobilized Probiotics. *Food and Bioprocess Technology*. <https://doi.org/10.1007/s11947-025-03837-2>
- Rachma Sari, A., Romadhon, F. A., Cahyanti, A. N., & Putri, A. S. (2025). Kandungan Warna, Karoten dan Kimia Tepung Labu Kuning dengan Perbedaan Lama Fermentasi *Saccharomyces cerevisiae*. *Pro Food*, 11(1), 16–28. <https://doi.org/10.29303/profood.v11i1.500>
- Rigueto, C. V. T., De Oliveira, R., Gomes, K. S., Alessandretti, I., Nazari, M. T., Rosseto, M., Krein, D. D. C., Loss, R. A., & Dettmer, A. (2023). From waste to value-added products: A review of opportunities for fish waste valorization.

- Environmental Quality Management*, 33(1), 203–221.  
<https://doi.org/10.1002/tqem.22040>
- Samappito, J., Niroram, K., & Chaingram, C. (2019). Manufacture and Properties of Purple Waxy Corn Yogurt and its Application in Probiotic Salad Dressing Production. *Food and Applied Bioscience Journal*, 9(1), 11–27.
- Sanett Matela, K., Karupiah Pillai, M., Matebesi-Ranthimo, P., & Ntakatsane, M. (2019). Analysis of Proximate Compositions and Physiochemical Properties of Some Yoghurt Samples from Maseru, Lesotho. *Journal of Food Science and Nutrition Research*, 02(03). <https://doi.org/10.26502/jfsnr.2642-11000023>
- Santos, C., Raymundo, A., Moreira, J. B., & Prista, C. (2025). Exploring the Potential of Lactic Acid Bacteria Fermentation as a Clean Label Alternative for Use in Yogurt Production. *Applied Sciences*, 15(5), 2686.  
<https://doi.org/10.3390/app15052686>
- Sebastian, A., Barus, T., Mulyono, N., & Yanti. (2018). Effects of Fermentation and Sterilization on Quality of Soybean milk. *International Food Research Journal*, 25(6), 2428–2434.
- Šertović, E., Sarić, Z., Oraščanin, M., Božanić, R., Barać, M., & Omanović-Miklićanin, E. (2022). Functional properties of cow's milk and soy drinks prepared by fermentation with probiotic and yoghurt bacteria. *Food Science and Technology*, 42, e66821. <https://doi.org/10.1590/fst.66821>
- Shanthakumar, P., Klepacka, J., Bains, A., Chawla, P., Dhull, S. B., & Najda, A. (2022). The Current Situation of Pea Protein and Its Application in the Food Industry. *Molecules*, 27(16), 5354.  
<https://doi.org/10.3390/molecules27165354>
- Song, J., Li, D., He, M., Chen, J., & Liu, C. (2016). Comparison of Carotenoid Composition in Immature and Mature Grains of Corn (*Zea Mays* L.) Varieties. *International Journal of Food Properties*, 19(2), 351–358.  
<https://doi.org/10.1080/10942912.2015.1031245>
- Stamp, P., Eicke, S., Jampatong, S., Le-Huy, H., Jompuk, C., Escher, F., & Streb, S. (2017). Southeast Asian waxy maize ( *Zea mays* L. ), a resource for amylopectin starch quality types? *Plant Genetic Resources*, 15(5), 430–437.  
<https://doi.org/10.1017/S1479262116000101>
- Sukto, S., Lomthaisong, K., Sanitchon, J., Chankaew, S., Scott, M. P., Lübberstedt, T., Lertrat, K., & Suriharn, B. (2020). Variability in Prolificacy, Total Carotenoids, Lutein, and Zeaxanthin of Yellow Small-Ear Waxy Corn Germplasm. *International Journal of Agronomy*, 2020, 1–12.  
<https://doi.org/10.1155/2020/8818768>
- Syamsuri, R., & Lestari, S. (2021). The effect of processing methods on the quality of soy milk. *IOP Conference Series: Earth and Environmental Science*, 807(2), 022050. <https://doi.org/10.1088/1755-1315/807/2/022050>
- Temple, N. J. (2022). A rational definition for functional foods: A perspective. *Frontiers in Nutrition*, 9, 957516. <https://doi.org/10.3389/fnut.2022.957516>



- Thanh, H. V., Thinh, N. Q., Thuan, N. Đ., Thao, L. T., & Hien, N. T. T. (2023). Agrobiological Characteristics and Biochemical Parameters of Purple Waxy Corn [*Zea mays* (L.) var *certaina*] in Son La Province, Vietnam. *Indian Journal Of Agricultural Research, Of*. <https://doi.org/10.18805/IJARE.AF-802>
- Vareltzis, P., Adamopoulos, K., Stavrakakis, E., Stefanakis, A., & Goula, A. M. (2016). Approaches to minimise yoghurt syneresis in simulated tzatziki sauce preparation. *International Journal of Dairy Technology*, *69*(2), 191–199. <https://doi.org/10.1111/1471-0307.12238>
- Vivar-Quintana, A. M., Beneitez De La Mano, E., & Revilla, I. (2006). Relationship between somatic cell counts and the properties of yoghurt made from ewes' milk. *International Dairy Journal*, *16*(3), 262–267. <https://doi.org/10.1016/j.idairyj.2005.03.006>
- Walther, B., Guggisberg, D., Badertscher, R., Egger, L., Portmann, R., Dubois, S., Haldimann, M., Kopf-Bolan, K., Rhyn, P., Zoller, O., Veraguth, R., & Rezzi, S. (2022). Comparison of nutritional composition between plant-based drinks and cow's milk. *Frontiers in Nutrition*, *9*, 988707. <https://doi.org/10.3389/fnut.2022.988707>
- Wang, X., Wang, L., Wei, X., Xu, C., Cavender, G., Lin, W., & Sun, S. (2025). Invited review: Advances in yogurt development—Microbiological safety, quality, functionality, sensory evaluation, and consumer perceptions across different dairy and plant-based alternative sources. *Journal of Dairy Science*, *108*(1), 33–58. <https://doi.org/10.3168/jds.2024-25322>
- Wang, Y., Guo, H., Wu, A., Ju, C., Jiang, J., & Chen, J. (2021). Multiple-strain *Lactobacillus* -fermented soymilk with antioxidant capacity and delicate flavour. *International Journal of Food Science & Technology*, *56*(11), 6052–6061. <https://doi.org/10.1111/ijfs.15253>
- Yang, L., Zhang, T., Li, H., Chen, T., & Liu, X. (2023). Control of Beany Flavor from Soybean Protein Raw Material in Plant-Based Meat Analog Processing. *Foods*, *12*(5), 923. <https://doi.org/10.3390/foods12050923>
- Yu, H., Liu, R., Hu, Y., & Xu, B. (2017). Flavor profiles of soymilk processed with four different processing technologies and 26 soybean cultivars grown in China. *International Journal of Food Properties*, *20*(sup3), S2887–S2898. <https://doi.org/10.1080/10942912.2017.1382507>
- Yuan, M., Singer, M. R., & Moore, L. L. (2021). Yogurt Consumption Is Associated with Lower Levels of Chronic Inflammation in the Framingham Offspring Study. *Nutrients*, *13*(2), 506. <https://doi.org/10.3390/nu13020506>
- Zang, J., Yan, B., Hu, H., Liu, Z., Tang, D., Liu, Y., Chen, J., Tu, Y., & Yin, Z. (2024). RETRACTED: The current advances, challenges, and future trends of plant-based yogurt. *Trends in Food Science & Technology*, *149*, 104531. <https://doi.org/10.1016/j.tifs.2024.104531>