

References

- Aalaei, K., Rayner, M., & Sjöholm, I. (2016). Storage stability of freeze-dried, spray-dried and drum-dried skim milk powders evaluated by available lysine. *LWT*, 73, 675-682.
- Abdulla, A. A. (2014). Antimicrobial activity of *Lactobacillus acidophilus* that carry the bacteriocin gene. *Int. J. Curr. Microbiol. App. Sci*, 3(6), 269-276.
- Adams, M. R., McClure, P. J., & Moss, M. O. (2024). *Food microbiology*. Royal society of chemistry.
- Adebola, O. O., Corcoran, O., & Morgan, W. A. (2014). Synbiotics: the impact of potential prebiotics inulin, lactulose and lactobionic acid on the survival and growth of lactobacilli probiotics. *Journal of functional foods*, 10, 75-84.
- Amrutha, N., Hebbar, H. U., Prapulla, S. G., & Raghavarao, K. S. M. S. (2014). Effect of additives on quality of spray-dried fructooligosaccharide powder. *Drying Technology*, 32(9), 1112-1118.
- Argaw, S. G., Beyene, T. M., Woldemariam, H. W., & Esho, T. B. (2023). Physico-chemical and functional characteristics of flour of Southwestern Ethiopia aerial and tuber yam (*Dioscorea*) species processed under different drying techniques. *Journal of Food Composition and Analysis*, 119, 105269.
- Ayetigbo, O., Latif, S., Abass, A., & Müller, J. (2021). Drying kinetics and effect of drying conditions on selected physicochemical properties of foam from yellow-fleshed and white-fleshed cassava (*Manihot esculenta*) varieties. *Food and Bioproducts Processing*, 127, 454-464.
- Barbosa-Cánovas, G. V., Fontana Jr, A. J., Schmidt, S. J., & Labuza, T. P. (Eds.). (2020). *Water activity in foods: fundamentals and applications*. John Wiley & Sons.
- Baroroh, H. N., Nugroho, A. E., Lukitaningsih, E., & Nurrochmad, A. (2021). Immune-enhancing effect of bengkoang (*Pachyrhizus erosus* (L.) Urban) fiber fractions on mouse peritoneal macrophages, lymphocytes, and cytokines. *J Nat Sci Biol Med*, 12(1), 84-92.
- Behera, K. K., Maharana, T., Sahoo, S., & Prusti, A. (2009). Biochemical quantification of protein, fat, starch, crude fibre, ash and dry matter content in different collection of greater yam (*Dioscorea alata* L.) found in Orissa. *Nature and Science*, 7(7), 24-32.

- Bender, F. E. (2020). *Statistical methods for food and agriculture*. CRC Press.
- BeMiller, J. N. (2017). Carbohydrate analysis. *Food analysis*, 333-360.
- Bienenstock, J., Kunze, W., & Forsythe, P. (2015). Microbiota and the gut–brain axis. *Nutrition reviews*, 73(suppl_1), 28-31.
- Birch, C. S., & Bonwick, G. A. (2019). Ensuring the future of functional foods. *International Journal of Food Science & Technology*, 54(5), 1467-1485.
- Bischoff, S. C. (2011). 'Gut health': a new objective in medicine?. *BMC medicine*, 9, 1-14.
- Brandenstein, C. V., Busch-Stockfisch, M., & Fischer, M. (2015). Sweetness and other sensory properties of model fruit drinks: does viscosity have an impact?. *Journal of the Science of Food and Agriculture*, 95(4), 809-818.
- Bruno, F. A., Lankaputhra, W. E. V., & Shah, N. P. (2002). Growth, viability and activity of *Bifidobacterium* spp. in skim milk containing prebiotics. *Journal of food science*, 67(7), 2740-2744.
- Buahom, J., Siripornadulsil, S., Sukon, P., Sooksawat, T., & Siripornadulsil, W. (2023). Survivability of freeze-and spray-dried probiotics and their effects on the growth and health performance of broilers. *Veterinary World*, 16(9), 1849.
- Buckman ES, Oduro I, Plahar WA, Tortoe C (2018) Determination of the chemical and functional properties of yam bean (*Pachyrhizus erosus* (L.) Urban) flour for food systems. *Food Sci Nutr* 6(2):457–463. <https://doi.org/10.1002/fsn3.574>
- Bujalance, C., Jiménez-Valera, M., Moreno, E., & Ruiz-Bravo, A. (2006). A selective differential medium for *Lactobacillus plantarum*. *Journal of Microbiological Methods*, 66(3), 572-575.
- Calín-Sánchez, Á., Lipan, L., Cano-Lamadrid, M., Kharaghani, A., Masztalerz, K., Carbonell-Barrachina, Á. A., & Figiel, A. (2020). Comparison of traditional and novel drying techniques and its effect on quality of fruits, vegetables and aromatic herbs. *Foods*, 9(9), 1261.
- Campos, V., Tappy, L., Bally, L., Sievenpiper, J. L., & Lê, K. A. (2022). Importance of carbohydrate quality: what does it mean and how to measure it?. *The Journal of nutrition*, 152(5), 1200-1206.

- Cao, L., Xu, Q., Xing, Y., Guo, X., Li, W., & Cai, Y. (2020). Effect of skimmed milk powder concentrations on the biological characteristics of microencapsulated *Saccharomyces cerevisiae* by vacuum-spray-freeze-drying. *Drying Technology*, 38(4), 476-494.
- Carlson, J. L., Erickson, J. M., Lloyd, B. B., & Slavin, J. L. (2018). Health effects and sources of prebiotic dietary fiber. *Current developments in nutrition*, 2(3), nzy005.
- Chen, B., Wang, X., Li, P., Feng, X., Mao, Z., Wei, J., Lin, X., Li, X., & Wang, L. (2023). Exploring the protective effects of freeze-dried *Lactobacillus rhamnosus* under optimized cryoprotectants formulation. *Lwt*, 173, 114295.
- Chuchird, P., Pattarathitiwat, P., & Pongprajak, A. (2024). Formulation and evaluation of physical, chemical and sensory properties of instant functional beverage powder containing Pathum Thani fragrance rice, soy protein and milk powder. *Food Research*, 8(3), 394-401.
- Choi, H. W., Park, S. E., & Son, H. S. (2023). Color image expression through CIE L* a* b* system in foods.
- Corry, J. E., Curtis, G. D. W., & Baird, R. M. (2003). de man, rogosa and sharpe (MRS) agar. *Handbook of culture media for food microbiology*, 37, 511-513.
- Darniadi, S., Amiarsi, D., & Hidayat, T. (2022). Foam-mat drying of potato powder: effect of foaming agents and preservatives agents on the physical attributes. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1024, No. 1, p. 012009). IOP Publishing.
- Davani-Davari, D., Negahdaripour, M., Karimzadeh, I., Seifan, M., Mohkam, M., Masoumi, S. J., Berenjian, A., & Ghasemi, Y. (2019). Prebiotics: definition, types, sources, mechanisms, and clinical applications. *Foods*, 8(3), 92.
- De Bouillé, A. G., & Beeren, C. J. M. (2016). Sensory evaluation methods for food and beverage shelf life assessment. In *The stability and shelf life of food* (pp. 199-228). Woodhead Publishing.
- Desai, A. R., Powell, I. B., & Shah, N. P. (2004). Survival and activity of probiotic lactobacilli in skim milk containing prebiotics. *Journal of Food Science*, 69(3), FMS57-FMS60.
- Di Cesare, M., Perel, P., Taylor, S., Kabudula, C., Bixby, H., Gaziano, T. A., McGhie, D. V., Mwangi, J., Pervan, B., Narula, J., Pineiro, D., & Pinto, F. J. (2024). The heart of the world. *Global heart*, 19(1), 11.

- Dinev, T., Beev, G., Denev, S., Dermendzhieva, D., Tzanova, M., & Valkova, E. (2017). Antimicrobial activity of *Lactobacillus acidophilus* against pathogenic and food spoilage microorganisms: a review.
- Eftimov, T., Korošec, P., Potočnik, D., Ogrinc, N., Heath, D., & Seljak, B. K. (2017). How to perform properly statistical analysis on food data? An e-learning tool: Advanced Statistics in Natural Sciences and Technologies. *Science within Food: Up-to-Date Advances on Research and Educational Ideas*, 144-151.
- Elok, Z., & Wilda, A. (2013). Comparative study of inulin extracts from dahlia, yam, and gembili tubers as prebiotic. *Food and Nutrition Sciences*, 2013.
- Escobar-Ledesma, F. R., Sánchez-Moreno, V. E., Vera, E., Ciobotă, V., Jentzsch, P. V., & Jaramillo, L. I. (2020). Extraction of inulin from Andean plants: An approach to non-traditional crops of Ecuador. *Molecules*, 25(21), 5067.
- Eryomenko, D. O., & Osmanova, Y. V. (2021). The influence of technological parameters of drying on the content of inulin in chicory and jerusalem artichoke powder. *Современная наука и инновации*, (1), 71-77.
- Firrman, J., Liu, L., Mahalak, K., Tanes, C., Bittinger, K., Tu, V., Bobokalonov, J., Mattei, L., Zhang, H., & Van den Abbeele, P. (2022). The impact of environmental pH on the gut microbiota community structure and short chain fatty acid production. *FEMS Microbiology Ecology*, 98(5), fiac038.
- Fitri, N. R., & Siswanto, A. P. (2023). Formulation of instant powder drink combination of red ginger and banana peel. *Materials Today: Proceedings*, 87, 101-105.
- Fitzpatrick, J. J., Barry, K., Cerqueira, P. S. M., Iqbal, T., O'Neill, J., & Roos, Y. H. (2007). Effect of composition and storage conditions on the flowability of dairy powders. *International Dairy Journal*, 17(4), 383-392.
- Gao, H., Li, X., Chen, X., Hai, D., Wei, C., Zhang, L., & Li, P. (2022). The functional roles of *Lactobacillus acidophilus* in different physiological and pathological processes. *Journal of microbiology and biotechnology*, 32(10), 1226.
- Gaspar, C., Donders, G. G., Palmeira-de-Oliveira, R., Queiroz, J. A., Tomaz, C., Martinez-de-Oliveira, J., & Palmeira-de-Oliveira, A. (2018). Bacteriocin production of the probiotic *Lactobacillus acidophilus* KS400. *Amb Express*, 8, 1-8.

- Ge, S., Han, J., Sun, Q., Zhou, Q., Ye, Z., Li, P., & Gu, Q. (2024). Research progress on improving the freeze-drying resistance of probiotics: a review. *Trends in Food Science & Technology*, 104425.
- Granato, D., Barba, F. J., Bursać Kovačević, D., Lorenzo, J. M., Cruz, A. G., & Putnik, P. (2020). Functional foods: Product development, technological trends, efficacy testing, and safety. *Annual review of food science and technology*, 11(1), 93-118.
- Guandalini, S. (2011). Probiotics for prevention and treatment of diarrhea. *Journal of clinical gastroenterology*, 45, S149-S153.
- Gul, K., Singh, A. K., & Jabeen, R. (2016). Nutraceuticals and functional foods: the foods for the future world. *Critical reviews in food science and nutrition*, 56(16), 2617-2627.
- Gupta, A., Sanwal, N., Bareen, M. A., Barua, S., Sharma, N., Olatunji, O. J., Nirmal, N. P., & Sahu, J. K. (2023). Trends in functional beverages: Functional ingredients, processing technologies, stability, health benefits, and consumer perspective. *Food Research International*, 170, 113046.
- Gupta, V., & Garg, R. (2009). Probiotics. *Indian journal of medical microbiology*, 27(3), 202-209.
- Gurry, T. (2017). Synbiotic approaches to human health and well-being. *Microbial Biotechnology*, 10(5), 1070-1073.
- Hall, M. B. (2013). Efficacy of reducing sugar and phenol-sulfuric acid assays for analysis of soluble carbohydrates in feedstuffs. *Animal feed science and technology*, 185(1-2), 94-100.
- Hamaker, B. R. (2008). *Technology of Functional Cereal Products*. CRC; Woodhead.
- Hardy, Z., & Jideani, V. A. (2017). Foam-mat drying technology: A review. *Critical reviews in food science and nutrition*, 57(12), 2560-2572.
- Hasibuan, A. K. H., Diana, W. O., & Widiyanti, Y. A. (2017). Relation Effect of Variation Time Storage Yam Tuber (*Pachyrrhizuserozus*) to Cholesterol *Rattusnorvegicus*. In *1st International Conference Postgraduate School Universitas Airlangga: " Implementation of Climate Change Agreement to Meet Sustainable Development Goals"(ICPSUAS 2017)* (pp. 234-238). Atlantis Press.

- Hayashi, K., Hara, H., Asvarujanon, P., Aoyama, Y., & Luangpituksa, P. (2001). Ingestion of insoluble dietary fibre increased zinc and iron absorption and restored growth rate and zinc absorption suppressed by dietary phytate in rats. *British journal of nutrition*, 86(4), 443-451.
- Ikanone, C. E. O., & Oyekan, P. O. (2014). Effect of boiling and frying on the total carbohydrate, vitamin C and mineral contents of Irish (*Solanum tuberosum*) and Sweet (*Ipomea batatas*) potato tubers. *Nigerian Food Journal*, 32(2), 33-39.
- Jalali, M., Abedi, D., Varshosaz, J., Najjarzadeh, M., Mirlohi, M., & Tavakoli, N. (2012). Stability evaluation of freeze-dried *Lactobacillus paracasei* subsp. tolerance and *Lactobacillus delbrueckii* subsp. *bulgaricus* in oral capsules. *Research in pharmaceutical sciences*, 7(1), 31.
- Jasson, V., Jacxsens, L., Luning, P., Rajkovic, A., & Uyttendaele, M. (2010). Alternative microbial methods: An overview and selection criteria. *Food microbiology*, 27(6), 710-730.
- Jayaraman, K. S., & Gupta, D. D. (2020). Drying of fruits and vegetables. In *Handbook of industrial drying* (pp. 643-690). CRC press.
- Jirayucharoensak, R., Khuenpet, K., Jittanit, W., & Sirisansaneeyakul, S. (2019). Physical and chemical properties of powder produced from spray drying of inulin component extracted from Jerusalem artichoke tuber powder. *Drying Technology*.
- Jones, P. J., & Jew, S. (2007). Functional food development: concept to reality. *Trends in food science & technology*, 18(7), 387-390.
- Kailasapathy, K., & Chin, J. (2000). Survival and therapeutic potential of probiotic organisms with reference to *Lactobacillus acidophilus* and *Bifidobacterium* spp. *Immunology and cell biology*, 78(1), 80-88.
- Kaur, S., & Das, M. (2011). Functional foods: An overview. *Food Science and Biotechnology*, 20, 861-875.
- Keservani, R. K., Kesharwani, R. K., Vyas, N., Jain, S., Raghuvanshi, R., & Sharma, A. K. (2010). Nutraceutical and functional food as future food: A review. *Der Pharmacia Lettre*, 2(1), 106-116.
- Khuenpet, K., Jittanit, W., & Sirisansaneeyakul, S. (2015). Comparison of hot air and superheated steam drying of Jerusalem artichoke (*Helianthus tuberosus* L.) tubers and inulin powder production. *Transactions of the ASABE*, 58(4), 1113-1125.

- Kim, Y. A., Keogh, J. B., & Clifton, P. M. (2018). Probiotics, prebiotics, synbiotics and insulin sensitivity. *Nutrition research reviews*, 31(1), 35-51.
- Kligler, B., & Cohrssen, A. (2008). Probiotics. *American family physician*, 78(9), 1073-1078.
- Koliaki, C., Dalamaga, M., & Liatis, S. (2023). Update on the obesity epidemic: after the sudden rise, is the upward trajectory beginning to flatten?. *Current Obesity Reports*, 12(4), 514-527.
- Kos, B. V. Z. E., Šušković, J., Vuković, S., Šimpraga, M., Frece, J., & Matošić, S. (2003). Adhesion and aggregation ability of probiotic strain *Lactobacillus acidophilus* M92. *Journal of applied microbiology*, 94(6), 981-987.
- Kumar, M., Dhaka, P., Vijay, D., Vergis, J., Mohan, V., Kumar, A., Kurkure, N. V., Barbuddhe, S. B., Malik, S. V. S., & Rawool, D. B. (2016). Antimicrobial effects of *Lactobacillus plantarum* and *Lactobacillus acidophilus* against multidrug-resistant enteroaggregative *Escherichia coli*. *International journal of antimicrobial agents*, 48(3), 265-270.
- Kunz, T., Lee, E. J., Schiwiek, V., Seewald, T., & Methner, F. J. (2011). Glucose—A reducing sugar? Reducing properties of sugars in beverages and food. *Brew. Sci*, 64, 61-67.
- Li, H., Zhang, T., Li, C., Zheng, S., Li, H., & Yu, J. (2020). Development of a microencapsulated synbiotic product and its application in yoghurt. *LWT*, 122, 109033.
- Liapis, A. I., & Bruttini, R. (2020). Freeze drying. In *Handbook of industrial drying* (pp. 309-343). CRC press.
- Lim, T. K. (2012). *Edible medicinal and non-medicinal plants* (Vol. 1, pp. 285-292). Dordrecht, The Netherlands: Springer.
- Lothenbach, B., Durdzinski, P., & De Weerd, K. (2016). Thermogravimetric analysis. *A practical guide to microstructural analysis of cementitious materials*, 1, 177-211.
- Majiding, C. M., Siddiq, M. N. A. A., & Rozi, F. (2023). Physical characteristics and shelf life estimation of instant powder drink made from the combination of yellow sweet potatoes and red beans. *Ad-Dawaa'Journal of Pharmaceutical Sciences*, 55-65.
- Manning, T. S., & Gibson, G. R. (2004). Prebiotics. *Best practice & research clinical gastroenterology*, 18(2), 287-298.

- Mansfield, S. D. (2020). Determination of total carbohydrates. *Methods to Study Litter Decomposition: A Practical Guide*, 121-129.
- Markowiak, P., & Śliżewska, K. (2017). Effects of probiotics, prebiotics, and synbiotics on human health. *Nutrients*, 9(9), 1021.
- Martel, J., Chang, S. H., Ko, Y. F., Hwang, T. L., Young, J. D., & Ojcius, D. M. (2022). Gut barrier disruption and chronic disease. *Trends in Endocrinology & Metabolism*, 33(4), 247-265.
- Martins, E., Cnossen, D. C., Silva, C. R. J., Junior, J. C., Nero, L. A., Perrone, I. T., & Carvalho, A. F. (2019). Determination of ideal water activity and powder temperature after spray drying to reduce *Lactococcus lactis* cell viability loss. *Journal of Dairy Science*, 102(7), 6013-6022.
- Mattila-Sandholm, T., Myllärinen, P., Crittenden, R., Mogensen, G., Fondén, R., & Saarela, M. (2002). Technological challenges for future probiotic foods. *International Dairy Journal*, 12(2-3), 173-182.
- Mayer, E. A., Nance, K., & Chen, S. (2022). The gut–brain axis. *Annual review of medicine*, 73(1), 439-453.
- Mohanty, D., Misra, S., Mohapatra, S., & Sahu, P. S. (2018). Prebiotics and synbiotics: Recent concepts in nutrition. *Food bioscience*, 26, 152-160.
- Moody, D. S., Hanidah, I. I., Kayaputri, I. L., Rialita, T., Sukarminah, E., & Zakaria, R. A. P. (2019). Microencapsulation of *Lactobacillus acidophilus* with freeze drying method and application to synbiotic beverage of banana corn stone. *International Journal Advanced Science Engineering Information Technology, (IJASAIT)*, 9, 2-532.
- Mumcu, A. S., & Temiz, A. (2014). Effects of prebiotics on growth and acidifying activity of probiotic bacteria.
- Nicanuru, C., Laswai, H. S., & Sila, D. N. (2015). Effect of sun-drying on nutrient content of orange fleshed sweet potato tubers in Tanzania. *Sky Journal of Food Science*, 4(7), 91-101.
- Nielsen, S. S. (2024). Total carbohydrate by phenol-sulfuric acid method. In *Nielsen's Food Analysis Laboratory Manual* (pp. 147-151). Cham: Springer International Publishing.
- Nomoto, K. (2005). Prevention of infections by probiotics. *Journal of bioscience and bioengineering*, 100(6), 583-592.

- Nurhartadi, E., Nawangwulan, R., & Utami, R. (2014). The Effect of Red Sweet Potato (*Ipomoea Batatas* L.) Substitution on Skim Milk as Prebiotic on Synbiotic Drink Powder Characteristic. In *International Congress on Challenges of Biotechnological Research in Food and Health*. Slamet Riyadi University.
- Oberoi, D. P. S., & Sogi, D. S. (2015). Effect of drying methods and maltodextrin concentration on pigment content of watermelon juice powder. *Journal of food engineering*, 165, 172-178.
- Oetjen, G. W., & Haseley, P. (2004). *Freeze-drying*. John Wiley & Sons.
- Oh, S. (2019). *Lactobacillus acidophilus* as a probiotics. *Journal of Dairy Science and Biotechnology*, 37(3), 155-166.
- Oliveira, R. P. D. S., Perego, P., De Oliveira, M. N., & Converti, A. (2011). Effect of inulin as a prebiotic to improve growth and counts of a probiotic cocktail in fermented skim milk. *LWT-Food Science and Technology*, 44(2), 520-523.
- Pandey, K. R., Naik, S. R., & Vakil, B. V. (2015). Probiotics, prebiotics and synbiotics-a review. *Journal of food science and technology*, 52, 7577-7587.
- Park, C. J., Lee, H. A., & Han, J. S. (2016). Jicama (*Pachyrhizus erosus*) extract increases insulin sensitivity and regulates hepatic glucose in C57BL/Ksj-db/db mice. *Journal of Clinical Biochemistry and Nutrition*, 58(1), 56-63.
- Pereira, W. A., Piazzentin, A. C., da Silva, T. M., Mendonça, C. M., Figueroa Villalobos, E., Converti, A., & Oliveira, R. P. S. (2023). Alternative fermented soy-based beverage: Impact of inulin on the growth of probiotic strains and starter culture. *Fermentation*, 9(11), 961.
- Perović, J., Kojić, J., Krulj, J., Pezo, L., Tumbas Šaponjac, V., Ilić, N., & Bodroža-Solarov, M. (2022). Inulin determination by an improved HPLC-ELSD method. *Food Analytical Methods*, 15(4), 1001-1010.
- Petkova, N., & Denev, P. (2015). Methods for determination of inulin.
- Petkova, N., Vrancheva, R., Denev, P., Ivanov, I., & Pavlov, A. (2014). HPLC-RID method for determination of inulin and fructooligosaccharides. *Acta Scientifica Naturalis*, 1(99), 107.

- Puangbut, D., Jogloy, S., Vorasoot, N., Srijaranai, S., Holbrook, C. C., & Patanothai, A. (2015). Variation of inulin content, inulin yield and water use efficiency for inulin yield in Jerusalem artichoke genotypes under different water regimes. *Agricultural Water Management*, 152, 142-150.
- Puyanda, I. R., Uriyapongson, S., & Uriyapongson, J. (2020). Influence of drying method on qualities of Jerusalem artichoke (*Helianthus tuberosus* L.) tuber harvested in Northeastern Thailand. *Songklanakarin Journal of Science & Technology*, 42(6).
- Qadri, O. S., Srivastava, A. K., & Yousuf, B. (2020). Trends in foam mat drying of foods: Special emphasis on hybrid foam mat drying technology. *Critical Reviews in Food Science and Nutrition*, 60(10), 1667-1676.
- Rahman, S. (2022). Development and Quality Evaluation of Mixed Fruits Drinks Powder (Doctoral dissertation, Chattogram Veterinary & Animal Sciences University).
- Ramos-de-la-Peña, A. M., Renard, C. M., Wicker, L., Montañez, J., de la Luz Reyes-Vega, M., Voget, C., & Contreras-Esquivel, J. C. (2012). Enzymatic liquefaction of jicama (*Pachyrhizus erosus*) tuberous roots and characterization of the cell walls after processing. *LWT-Food Science and Technology*, 49(2), 257-262.
- Rawat, S. (2015). Food Spoilage: Microorganisms and their prevention. *Asian journal of plant science and Research*, 5(4), 47-56.
- Redondo-Cuenca, A., Herrera-Vázquez, S. E., Condezo-Hoyos, L., Gómez-Ordóñez, E., & Rupérez, P. (2021). Inulin extraction from common inulin-containing plant sources. *Industrial Crops and Products*, 170, 113726.
- Reid, D. S. (2020). Water activity: fundamentals and relationships. *Water activity in foods: Fundamentals and applications*, 13-26.
- Roberfroid, M. (2007). Prebiotics: The concept revisited¹. *The Journal of nutrition*, 137(3), 830S-837S.
- Roberfroid, M., Gibson, G. R., Hoyles, L., McCartney, A. L., Rastall, R., Rowland, I., Wolves, D., Watzl, B., Szajewska, H., Stahl, B., Guarner, F., Respondek, F., Whelan, K., Coxam, V., Davicco, M., Léotoing, L., Wittrant, Y., Delzenne, N. M., Cani, P. D., Neyrinck, A. M., & Meheust, A. (2010). Prebiotic effects: metabolic and health benefits. *British Journal of Nutrition*, 104(S2), S1-S63.

- Rubel, I. A., Iraporda, C., Novosad, R., Cabrera, F. A., Genovese, D. B., & Manrique, G. D. (2018). Inulin rich carbohydrates extraction from Jerusalem artichoke (*Helianthus tuberosus* L.) tubers and application of different drying methods. *Food Research International*, 103, 226-233.
- Ruiz-Mirazo, K., Briones, C., & de la Escosura, A. (2014). Prebiotic systems chemistry: new perspectives for the origins of life. *Chemical reviews*, 114(1), 285-366.
- Ruttarattanamongkol, K., Chittrakorn, S., Weerawatanakorn, M., & Dangpium, N. (2016). Effect of drying conditions on properties, pigments and antioxidant activity retentions of pretreated orange and purple-fleshed sweet potato flours. *Journal of Food Science and Technology*, 53, 1811-1822.
- Saito, T. (2004). Selection of useful probiotic lactic acid bacteria from the *Lactobacillus acidophilus* group and their applications to functional foods. *Animal Science Journal*, 75(1), 1-13.
- Samolińska, W., Kowalczyk-Vasilev, E., & Grela, E. R. (2018). Comparative effect of different dietary inulin sources and probiotics on growth performance and blood characteristics in growing–finishing pigs. *Archives of animal nutrition*, 72(5), 379-395.
- Sanders, M. E., & Klaenhammer, T. R. (2001). Invited review: the scientific basis of *Lactobacillus acidophilus* NCFM functionality as a probiotic. *Journal of dairy science*, 84(2), 319-331.
- Sanders, M. E., Merenstein, D., Merrifield, C. A., & Hutkins, R. (2018). Probiotics for human use. *Nutrition bulletin*, 43(3), 212-225.
- Sangamithra, A., Sivakumar Venkatachalam, S. V., John, S. G., & Kannan Kuppuswamy, K. K. (2015). Foam mat drying of food materials: A review.
- Santoso, P., Amelia, A., & Rahayu, R. (2019). Jicama (*Pachyrhizus erosus*) fiber prevents excessive blood glucose and body weight increase without affecting food intake in mice fed with high-sugar diet. *Journal of Advanced Veterinary and Animal Research*, 6(2), 222.
- Sarkar, M., Sah, A., Agarwal, P., Joshi, S., & Hait, S. (2024). Quantification Tests for Carbohydrate Detection. In *Practical Biochemistry* (pp. 32-54). Bentham Science Publishers.
- Sawangwan, T., Wansanit, W., Pattani, L., & Noysang, C. (2018). Study of prebiotic properties from edible mushroom extraction. *Agriculture and Natural Resources*, 52(6), 519-524.

- Senz, M., van Lengerich, B., Bader, J., & Stahl, U. (2015). Control of cell morphology of probiotic *Lactobacillus acidophilus* for enhanced cell stability during industrial processing. *International journal of food microbiology*, 192, 34-42.
- Sergeev, I. N., Aljutaily, T., Walton, G., & Huarte, E. (2020). Effects of synbiotic supplement on human gut microbiota, body composition and weight loss in obesity. *Nutrients*, 12(1), 222.
- Sekhon, B. S., & Jairath, S. (2010). Prebiotics, probiotics and synbiotics: an overview. *Journal of Pharmaceutical Education & Research*, 1(2).
- Setyaningsih, D., Rahmalia, R., & Sugiyono, D. (2010). Kajian mikroenkapsulasi ekstrak vanili. *J. Tek. Ind. Pert*, 19(2), 64-70.
- Scott, K. P., Duncan, S. H., & Flint, H. J. (2008). Dietary fibre and the gut microbiota. *Nutrition bulletin*, 33(3), 201-211.
- Shao, Y., & Lin, A. H. M. (2018). Improvement in the quantification of reducing sugars by miniaturizing the Somogyi-Nelson assay using a microtiter plate. *Food chemistry*, 240, 898-903.
- Shekhar, S., Mishra, D., Buragohain, A. K., Chakraborty, S., & Chakraborty, N. (2015). Comparative analysis of phytochemicals and nutrient availability in two contrasting cultivars of sweet potato (*Ipomoea batatas* L.). *Food chemistry*, 173, 957-965.
- Shukla, S. (2011). Freeze drying process: A review. *International journal of pharmaceutical sciences and research*, 2(12), 3061.
- Sintasari, R. A., Kusnadi, J., & Ningtyas, D. W. (2014). Pengaruh penambahan konsentrasi susu skim dan sukrosa terhadap karakteristik minuman probiotik sari beras merah. *Jurnal pangan dan Agroindustri*, 2(3), 65-75.
- Sithisarn, P., Gritsanapan, W., & Jateleela, S. (2015). Formulation and quality control of readily dissolving drink powder from *Antidesma ghaesembilla* fruits. *J. Nat. Sci*, 14, 89-101.
- Sohail, A., Turner, M. S., Coombes, A., & Bhandari, B. (2013). The viability of *Lactobacillus rhamnosus* GG and *Lactobacillus acidophilus* NCFM following double encapsulation in alginate and maltodextrin. *Food and Bioprocess Technology*, 6, 2763-2769.

- Štofilová, J., Kvaková, M., Kamlárová, A., Hijová, E., Bertková, I., & Guľašová, Z. (2022). Probiotic-based intervention in the treatment of ulcerative colitis: conventional and new approaches. *Biomedicines*, 10(9), 2236.
- Stoker, P., Tian, G., & Kim, J. Y. (2020). Analysis of variance (ANOVA). In *Basic quantitative research methods for urban planners* (pp. 197-219). Routledge.
- Stone, H., Bleibaum, R. N., & Thomas, H. A. (2020). *Sensory evaluation practices*. Academic press.
- Struck, S., Gundel, L., Zahn, S., & Rohm, H. (2016). Fiber enriched reduced sugar muffins made from iso-viscous batters. *LWT*, 65, 32-38.
- Sulaksono, A. C., Kumalaningsih, S., Wignyanto, W., & Santoso, I. (2013). Production and processing of yoghurt powder using foam-mat drying.
- Sutton, S. (2010). The most probable number method and its uses in enumeration, qualification, and validation. *Journal of Validation Technology*, 16(3), 35.
- Usmiati, S., Budiyanto, A., & Yuliana, T. (2022). Optimizing Skim Milk Concentration and Type of Starters in The Processing of a Whey Probiotic Drink. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1024, No. 1, p. 012013). IOP Publishing.
- Vandenplas, Y., Huys, G., & Daube, G. (2015). Probiotics: an update. *Jornal de pediatria*, 91, 06-21.
- Vasavada, P. C., Lee, A., & Betts, R. (2020). Conventional and novel rapid methods for detection and enumeration of microorganisms. *Food safety engineering*, 85-128.
- Vitali, B., Ndagijimana, M., Cruciani, F., Carnevali, P., Candela, M., Guerzoni, M. E., & Brigidi, P. (2010). Impact of a synbiotic food on the gut microbial ecology and metabolic profiles. *BMC microbiology*, 10, 1-13.
- Wan, M. L., Ling, K. H., El-Nezami, H., & Wang, M. F. (2019). Influence of functional food components on gut health. *Critical reviews in food science and nutrition*, 59(12), 1927-1936.
- Wang, L., Yu, X., Xu, H., Aguilar, Z. P., & Wei, H. (2016). Effect of skim milk coated inulin-alginate encapsulation beads on viability and gene expression of *Lactobacillus plantarum* during freeze-drying. *LWT-food Science and Technology*, 68, 8-13.

- Wathoni, N. A. S. R. U. L., Haerani, A., Yuniarsih, N., & Haryanti, R. E. T. N. O. (2018). A review on herbal cosmetics in Indonesia. *International Journal of Applied Pharmaceutics*, 10(5), 13-16.
- Wichchukit, S., & O'Mahony, M. (2015). The 9-point hedonic scale and hedonic ranking in food science: some reappraisals and alternatives. *Journal of the Science of Food and Agriculture*, 95(11), 2167-2178.
- Wong, S. X., Jusoh, Y. M. M., Muhamad, I. I., & Hashim, Z. (2023). Formulation of Papaya Fruit Powder Incorporated Instant Drink Mix. *Journal of Bioprocessing and Biomass Technology*, 2(1), 19-23.
- Wrolstad, R. E., & Smith, D. E. (2017). Color analysis. *Food analysis*, 545-555.
- You, S., Ma, Y., Yan, B., Pei, W., Wu, Q., Ding, C., & Huang, C. (2022). The promotion mechanism of prebiotics for probiotics: A review. *Frontiers in Nutrition*, 9, 1000517.
- Yousefi, B., Eslami, M., Ghasemian, A., Kokhaei, P., Salek Farrokhi, A., & Darabi, N. (2019). Probiotics importance and their immunomodulatory properties. *Journal of cellular physiology*, 234(6), 8008-8018.
- Yudhistira, B., Fatmawati, A., & Prabawa, S. (2023). Effect of temperature and foam mat drying method on the physical and chemical properties of white sweet potato (*Ipomoea batatas* L.) inulin. *Food Research*, 7(5), 332-338.
- Zambrano, M. V., Dutta, B., Mercer, D. G., MacLean, H. L., & 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, 484-496.
- Zhang, M. M., Cheng, J. Q., Lu, Y. R., Yi, Z. H., Yang, P., & Wu, X. T. (2010). Use of pre-, pro-and synbiotics in patients with acute pancreatitis: a meta-analysis. *World journal of gastroenterology: WJG*, 16(31), 3970.
- Zheng, X., Fu, N., Duan, M., Woo, M. W., Selomulya, C., & Chen, X. D. (2015). The mechanisms of the protective effects of reconstituted skim milk during convective droplet drying of lactic acid bacteria. *Food Research International*, 76, 478-488.