

DAFTAR PUSTAKA

- Abrehaa, E., P. Getachewa, A. Laillou, S. Chitekwe dan K. Baye. 2021. Physico Chemical and Functionality of Air and Spray Dried Egg Powder: Implications to Improving Diets. *International Journal of Food Properties*. 24(1):152-162.
- Agale, P. G., Mane, P. C., Dhole, V. R., Kadam, D. D., dan Chaudhari, R. D. 2024. Biotechnological approach for bioremediation of textile and pesticides industrial pollutants (pp. 121–140).
- Alshora, D. H, M. A. Ibrahim dan F. K. Alanazi. 2016. Nanotechnology from particle size reduction to enhancing aqueous solubility. In *Surface Chemistry of Nanobiomaterials* (pp. 163-191). William Andrew Publishing.
- An, S, Y., Kwak., J. Ham dan M. Y. Lee. 2025. Brightness Scales Above and Below Reference White Via Maximum Likelihood Difference Scaling (MLDS). *SID's Digest of Technical Papers*. 56(1):988-989.
- AOAC. 2023. *Official Methods of Analysis of AOAC Internasional*. 22nd ed. *Method 925.10*. AOAC Internasional. Rockville, MD, USA.
- Arifin, N., M. Monica dan F. Fatati. 2023. Pengaruh penambahan ragi tempe terhadap kualitas fisik tepung putih telur itik. *Prosiding SENACENTER*. 2(1):69-75.
- Asmediana, A., Hastuti, dan P Supriyadi. 2017. Perubahan Komponens Rasa Gurih Dalam Cambuk yang Mengalami Penyimpanan dan Pemanasan Berulang. *Agroindustrial Technology Journal*, 1(1) : 1-9.
- Astuti, R.M. 2019. Kualitas bakso daging ayam hasil pemanfaatan putih telur limbah praktek mata kuliah *pastry* dan *bakery* sebagai bahan pengenyal alami ditinjau dari aspek inderawi. *Jurnal Teknologi Busana dan Boga*. 7(1): 53-60.
- Auliarasulina, S., S. Melia dan I. Juliarsy. 2025. Effect of storage time of fermented milk using *Lactiplantibacillus plantarum* SN13T on fermented milk quality. *Jurnal Ilmu dan Teknologi Hasil Ternak*. 20(1):1-18.
- Azizah, N. F. N., H. Evanuarini dan E. S. Widyastuti. 2022. Physicochemical characteristics of egg white powder using *Lactobacillus bulgaricus*. *IOP Conference Series: Earth and Environmental Science*, 1020(1), 012028.
- Badan Pusat Statistik (BPS). 2024. Statistik industri pengolahan makanan dan minuman tahun 2024. Jakarta: BPS RI.

- Chang, C., X. Shen, Y. Wang, Z. Wei, Y. Su, L. Gu, Y. Yang, dan J. Li. 2024. Lactic acid bacteria fermentation-induced egg white protein structure deformation influencing gelling properties, with membrane concentration as a strategy to improve texture. 89(11):7083-7094.
- Day, B.S. 2021. Pengaruh lama dan suhu penyimpanan limbah putih telur ayam ras terhadap total plate count (TPC) dan water activity (Aw) tepung putih telur. Skripsi. Fakultas Pertanian. Universitas Tribhuwana Tunggaladewi, Malang.
- Evanuarini, H. dan H. A. Nidhal. 2024. Kualitas fisikokimia pada bubuk putih telur ayam menggunakan karagenan. Jurnal Peternakan Indonesia. 26(1):38-44.
- Evanuarini, H., H.A. Nidhal, dan C. D. Anisa. 2025. Effect of carboxyl methyl cellulose (CMC) addition on physicochemical quality of salted egg white powder. Jurnal Ilmu Ternak. Universitas Padjajaran. 25(1):53-64.
- Fadhila, N., M. Monica dan O. Mega. 2023. Kualitas fisik tepung putih telur gagal tetas dengan penambahan ragi tape. Buletin Peternakan Tropis. 4(2):119-126.
- Fakhruzy, F., A. Kasim dan A. Anwar. 2023. The effect of Rhizopus sp. concentration and fermentation time on the characteristics of country chicken egg white flour. Journal of Global Sustainable Agriculture. 4(1):75-79.
- Fitri, B.A.L., Murdiah dan B.P. Hidayati. 2025. *Maillard* and caramelization reactions in confectionery products. Journal of Innovation Research and Knowledge. 5(2):2601-2610.
- Fu, W., A. Kobayashi dan H. Yano. 2025. Improvement in smoothness of fermented soymilk yogurt-mimic by effective use of applicable lactic acid bacteria strains. Foods. 14(18):3235.
- Gao, Y., R. Li, J. Pen, Y. Zhang, R. Gao, N. Xia, H. Liu, dan L. Wang. 2025. Effects of Egg White on the Texture, Physicochemical Properties and Sensory Characteristics of Double Protein Yogurt During Storage. Food Science. Northeast University. Vol 11(11):865.
- Garg, D., A. Bandyopadhyay, A. Sengupta dan A. Sengupta. 2021. Measurement of moisture content in milk powder using terahertz time-domain spectroscopy. 11685:168-175.
- Godbert, S.R., N.R. Guyot, Y. Nys, 2019. The golden egg: Nutritional value, bioactivities, and emerging benefits for human health. Nutrients. 11(3): 684.

- Grassi, T.L.M.T.D.S, Marcos., J.F., Cavazzana, dan E.H.G., Pansano. 2016. Egg white dehydration by atomization. *Clencia Animal Brasileira*. 17(4), 601-607.
- Gundogan, B.N, C. Saricoban, dan K. Unal. 2023. The effect of different drying methods on some physicochemical, functional and protein structure properties of liquid egg white fermented by *Lactobacillus rhamnosus* GG. *Food Bioscience*. 52. 102352.
- Hemhirun, S. dan P. Bunyawanchakul. 2020. The use of temperature and relative humidity sensors to estimate the final moisture content of the drying process. *International Journal of Engineering Research and Technology*. 9(05).
- Hanafiah, K.A. 2014. Rancangan Percobaan: Teori dan Aplikasi. Edisi Ketiga. Rajawali Pers, Jakarta.
- Herawati, E.R.N, A. Febrisiantosa, A. Ningrum, N.K Hendrasty, I. Suppavorasatit, dan U. Santoso. 2024. Physicochemical and functional characteristics of egg white powder as affected by pre-treatment and drying methods. *Food Research*. 8 (5) : 365 – 372.
- Indrawan.I, G. 2012. Kualitas Telur dan Pengetahuan Masyarakat Tentang Penanganan Telur di tingkat Rumah Tangga. Denpasar. Indonesia Medicus Veterinus.1:607-670 ISSN: 2301-784
- Jain, S., dan A.K. Anal. 2017. Production and Characterization of Functional Properties of Protein Hydrolysates from Eggshell Membranes by Lactic Acid Bacteria Fermentation. *Korean Journal of Food Science and Animal Resources*, 37 (3), 350–359.
- Jia, J., Duan, J., Jia, X., Ge, J., Dong, M., Liu, X dan Duan, X 2024. Mechanism of enhancing rehydration capacity and foaming property of spray-dried egg white powder by lactic acid fermentation. *Food Hydrocolloids*, 153, 110037.
- Juarez-Enriquez, E., G. I. Olivas, P. B. Zamudio-Flores, S. B. Pérez-Vega, I. Salmerón, E. Ortega-Rivas dan D. R. Sepulveda. 2022. A review on the influence of water on food powder flowability. *Journal of Food Process Engineering*. 45(5).
- Kamei, M., M. Nishibe, R. Araki, K. Kohyama dan Y. Kusakabe. 2023. Effect of texture preference on food texture perception: exploring the role of matching food texture and preference. *Appetite*. 107078.

- Kemalawaty, M., C. Anwar., dan I. R. Aprita. 2019. Kajian Pembuatan Dendeng Ayam Sayat dengan Penambahan Ekstrak Asam. *Jurnal Peternakan Sriwijaya*. 8(1): 1-8.
- Lestari, T. A., Jumiono, A., Fanani, M. Z dan Akil, S. 2022. Proses pengolahan telur beku. *Jurnal Ilmiah Pangan Halal*, 4(1), 35-39.
- Li, J., X. Whang., C. Chang., L. Cu., Y. Su, Y. Yang, D. Agyei, Q. Han. 2024. Chicken Egg White Gel: Preparation, Modification, and Application in Food and Oral Nutraceutical Administration. 13(12):1834.
- Li, Z., X. Huang, Q. Tang, M. Ma, Y. Jin dan L. Sheng. 2022. Functional Properties and Extraction Techniques of Chicken Egg White Proteins. *Food Hydrocolloids*. 124: 107243.
- Lima, F. E. T. dan C. M. Souza. 2025. The influence of food colors on emotional perception and consumer acceptance: a sensory and emotional profiling approach in gastronomy.
- Lv, X., H. Jin, X. Fu, J. Lv, R. Chen, M. Shi, Y. Lv, dan Y. Jin. 2024. Egg white fermentation by lactic acid bacteria: effect on gel characteristics and preliminary investigation of suitable genera. 61.104582
- Madzharov, A. V., Ramanathan, S dan Block, L. G. 2016. The Halo Effect of Product Color Lightness on Hedonic Food Consumption. *Journal of the Association for Consumer Research*, 1(4), 579–591.
- Melia, S., I. Juliyarsi, R.D. Setiawan, S.N. Aritonang, A. Hurriya dan S. Doni. 2024. Pengaruh pati bengkuang (*Pachyrhizu erosus L.*) terhadap sifat dan potensi probiotik susu fermentasi *L. plantarum* SN13T. Fakultas Peternakan. Universitas Andalas, Padang.
- Melia, S., I. Juliyarsi, S. N. Aritonang dan R. D. Setiawan. 2024. Evaluation of fermented goat milk quality *Lactobacillus plantarum* SNT13 enhanced with *Clitoria ternatea* flower extract and stingless bee honey (*Heterotrigona itama*). *Preventive Nutrition and Food Science*. 29(4):546.
- Melia, S., S.N. Aritonang, I. Juliyarsi, Y.F. Kurnia, Rusdimansyah dan V.O. Hernita. 2022. The screening of probiotic lactic acid bacteria from honey of stingless bee from West Sumatera, Indonesia, and using a starter culture. Fakultas Peternakan. Universitas Andalas, Padang.
- Meng, Y., N. Qiu, V. Guyonet dan Y. Mine. 2022. Unveiling and application of the chicken egg proteome: An overview on a two-decade achievement. *Food Chem*. 1:393:133403.

- Nahariah, A.M. Legowo, E. Abustam, A. Hintono, Y.B Pramono, dan F. 2018. Growth ability *Lactobacillus plantarum* bacteria on the chicken egg white at different fermentation time. Fakultas Peternakan. Universitas Hasanuddin. Makasar.
- Nahariah, E. Abustam, dan R. Malaka. 2016. Physicochemical Characteristics of Egg White Flour Product of Fermentation of *Saccharomyces cereviceae* and Sucrose Addition. Program Studi Teknologi Hasil Ternak Fakultas Peternakan, Universitas Hasanuddin.
- Nimalaratne, C., dan J. Wu. 2015. Hen Egg as an Antioxidant Food Commodity: A Review.7(10):8274–8293.
- Novra, A., E. Yulianti dan Syamsuardi. 2020. Evaluasi reaksi *Maillard* dalam pengolahan limbah putih telur menjadi tepung fungsional. Jurnal Teknologi dan Industri Pangan. 31(2): 113-121.
- Nurliyani, Y. Erwanto, Rumiati, dan A.S. Sukarno. 2023. Characteristics of protein and amino acid in various poultry egg white ovomucoid. Food Science and Technology. Faculty of Animal Science, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Osik, N. A, N. N. Lukzen, V. V Yanshole dan Y. P. Tsentalovich. 2024. Loss of Volatile Metabolites during Concentration of Metabolomic Extracts. *ACS Omega*.
- Prakusya, T.N, C.H. Wibowo dan A. Sampurno. 2021. Sifat Fisikokimia dan Fungsional Tepung Telur dengan Penambahan Berbagai Konsentrasi Raagi Roti (*Saccharomyces cereviceae*) Universitas Semarang. Jurnal Ilmiah Teknologi Pangan.vol 3(1)
- Puglisi. M.J., dan M.L. Fernandez. 2022. The Health Benefits of Egg Protein. 14(14):2904.
- Rathnapala, E.C.N., D.U. Ahn dan S. Abeyrathne, 2021. Functional properties of ovotransferrin from chicken egg white and its derived peptides: a review. Food Science and Biotechnology. 30:619–630.
- Razi, M.S., H. Fahim, S. Amirabadi, dan A. Rashidinejad. 2023. An overview of the functional properties of egg white proteins and their application in the food industry. Hidrokoloid Pangan. 139:108183.
- Romantica, E., I. Thohari dan L. E. Radiati. 2017. Effect of fermentation time on water content, rendement, foaming capacity and foaming stability of pan drying egg powder. Jurnal Aplikasi Teknologi Pangan. 1-8.

- Setyawati, D., R. Wijayanti dan A. Hidayat. 2019. Evaluasi warna dan kestabilan tepung telur selama penyimpanan. *Agroteknologi*. 5(1): 22-28.
- Shang, Z., D. Yu, J. Zhang, F. Yang, C. Yang, Y. Zhang, X. Zhang, dan L. Ma. 2025. Advances in research on the effects of lactic acid bacteria on the physicochemical, flavor, and nutritional characteristics of fermented egg products. *Food Science and Engineering, Shanxi Agricultural University, Jinzhong 030801, China*. Vol 3(2):9240112.
- Sharma, R., P. Garg, P. Kumar, S. K. Bhatia dan S. Kulshrestha. 2020. Microbial fermentation and its role in quality improvement of fermented foods. *Fermentation*.6(4):106.
- Soetikno, N., Ristiarini, S. Dan Khairina, R. 2018. Sifat Sensoris, Kimia dan Warna, Ronto pada Konsentrasi Garam dan Nasi yang Berbeda. *Pengolahan Hasil Perikanan Indonesia*. 21(1): 85-91
- Spence, C., C. A. Levitan, M. U. Shankar dan M. Zampini. 2010. Does food color influence taste and flavor perception in humans. *Chemosensory Perception*. 3(1):68-84.
- Standar Nasional Indonesia. 1996. SNI 01-4323-1996: Tepung putih telur. Badan Standardisasi Nasional.
- Sulastri, A., B. Manguntungi., L. R. Vanggy. 2020. Analisis viabilitas *Lactobacillus lactis* pada inovasi media dasar pertumbuhan alternatif dan media dasar penepungan bakteri asam laktat. *Jurnal Tambora* Vol. 4 No. 2.
- Sukarno, A.S., Nurliyani, Y. Erwanto, S. Rakhmatullah, dan Rifqi. 2023. Antibacterial and antioxidant activity of protein hydrolysate extracted from different Indonesian avian egg white. *Departemen Teknologi Hasil Ternak. Fakultas Peternakan, Universitas Gadjah Mada*. Vol 18: 27-33.
- Tanasupawat, S., A. Chantarasiri, S. Sukontasing, dan D. Moonmangmee. 2021. Characterization of *Lactiplantibacillus plantarum* strains isolated from traditional fermented foods. *Microbiology Research*. 12(2): 145-153.
- Tomczak, A., M.Z. Dawidziak, P. Klimowicz, M. Hejdys, S. Kaczmarck, A. Siger, dan A. Cieslak. 2024. *Food Chemistry*. Poznan University of Life Sciences, ul. Mazowiecka 48, 60-623 Poznan, Poland.

- Tsivirko, I. L., I. V. Yatsenko, L. V. Busol, O. I. Parilovsky, A. M. Bogatyreva, and R. O. Kryvorotko. 2021. Dry egg products and definition of their safety and quality. *Veterinary Science, Technologies of Animal Husbandry and Nature Management*. 7:163-166.
- Usmiati, S. dan T, Marwati. 2007. Seleksi dan optimasi proses produksi bakteriosin dari *Lactobacillus* sp. *Jurnal Pascapanen*. Vol 4. No 1.
- Vargas-del-Río, L. M., A. García-Figueroa, A. Fernández-Quintero dan A. Rodríguez-Stouvenel. 2022. Spray-drying hen eggs: effects of the egg yolk to egg white ratio and sucrose addition on physicochemical, functional, and nutritional properties. *Applied Sciences*. 12(9):4516.
- Vera-Peña, M. Y., Hernández-García, H Valencia-García, F. E. 2022. Kinetic modeling of lactic acid production, co-substrate consumptions and growth in *Lactiplantibacillus plantarum* 60-1. *Dyna-Colombia*, 89(224), 50–57.
- Wei, G., Yang, Z., Regenstein, J. M., Liu, X dan Liu, D 2020. Characterizing aroma profiles of fermented soybean curd with ageing solutions during fermentation. *Food Bioscience*, 33, 100508.
- Wicaksono, Y., B. Wisudyaningsih, K. Priyadi, D. W. Priyadi, A. P. Laily dan S. B. Putri. 2023. Effect of hydrophilic polymers on solubility properties of ketoprofen-2,5-dihydroxybenzoic acid multicomponent solids. *Molekul: Jurnal Ilmiah Kimia*.
- Wronkowska, M, D. Szawara-Nowak, M. K. Piskula dan H. Zieliński. 2023. Bioaccessibility of *Maillard* Reaction Products from Biscuits Formulated from Buckwheat Flours Fermented by Selected Lactic Acid Bacteria. *Microorganisms*, 11(4), 883.
- Yuliawaty, S. T., dan W. H. Susanto. 2015. Pengaruh Lama Pengeringan dan Konsentrasi Maltodekstrin Terhadap Karakteristik Fisik Kimia dan Organoleptik Minuman Instan Daun Mengkudu (*Morinda Citrifolia* L). *Jurnal Pangan dan Agroindustri*. 3(1): 41-52.
- Zhang, C., Shu, G., Lei, N., Cheng, F., Li, W dan Meng, J. 2021). Effect of medium composition on cell envelope proteinase production by *Lactobacillus plantarum* LP69. 25, 261–274.
- Zhang, R.Y, Y.J. Yang, W.J. Zhang, J.H. Li, Y.J. Su, L.P, Gu, dan C.H. Chang. 2025. Explore the synergistic effects of *Lactobacillus plantarum* fermentation and tea polyphenols on the deodorization of egg white powder from the perspective of protein site competition. *Food Research International*. 185.114736.

- Zhang, X., B, Chelliappan dan Rajeswari. 2021. Recent Advances in Applications of Bioactive Egg Compounds in Nonfood Sectors. *Frontiers in Bioengineering and Biotechnology*. 9:738993.
- Zhao, Y. 2013. Analysis of volatile flavor compounds of preserved egg white. *Science and Technology of Food Industry*.
- Zheng, J., S. Wittouck, E. Salvetti, C. M. A.P. Franz, H. M. B. Harris, P. Mattarelli, dan S. Lebeer. 2020. A taxonomic note on the genus *Lactobacillus*: Description of 23 novel genera, emended description of the genus *Lactobacillus*, and union of the family *Lactobacillaceae* and *Leuconostocaceae*. *International Journal of Systematic and Evolutionary Microbiology*. 70(4): 2782-2858

