

STAFF HANDBOOK

Name / Nama	Prof. Dr. Fatma, S.Pt., M.P.
Position / Bidang keilmuan	Dairy Processing Science and Technology
Academic career / Riwayat Pendidikan	S1: Animal Production, Faculty of Animal Science, Hasanuddin University S2: agricultural systems, Animal Husbandry concentration programs, Hasanuddin University S3: Animal Science, Faculty of Animal Husbandry, Gadjah Mada University
Employment / Pekerjaan	Lecturer
Research and development projects over the last 5 years / Riwayat penelitian 5 tahun terakhir	1. 2020. Study of Functional Properties and Physico-Chemical Quality of Pasteurized Milk with the Addition of Matoa Leaf Extract and Alginate. Master Thesis Research 2. 2021. Upgrading Biodegradable Edible Film with Functional Properties. Applied Research. 3. 2022. Scaling Up Prebiotic and Anti-cancer Cheese from Dangke as a Local Product towards the Export Market. Kedaireka 4. 2022. Utilization of Smart Feed Processing Technology for Scaling Up Complementary Feed Production Integrated with Corn by Product Utilization. Kedaireka 5. 2022. Study of Functional Halal Kefir Characteristics by Optimizing Fermentation Duration and Heating. Master Research. 6. 2023. Physicochemical Characteristics of Biodegradable Edible Film as Food Coating with the Addition of Red Ginger Juice (Zingiber Officinale Var. Rubrum). Collaborative Fundamental Research. 7. 2023. Innovation in Functional Cheese Making using Edible Film coating made from Whey Dangke Combined with Konjac Flour and Carrageenan. 8. 2023. Innovation in Functional Cheese Making using Edible Film coating made from Dangke Whey Combined with Konjac Flour and Carrageenan. Collaborative Fundamental Research. 9. 2024. Potential and Characteristics of Whey Dangke as Fiber-Rich Nata De Functional Food. Collaborative Fundamental Research.

	10. 2024. Improvement of functional properties of local chicken meat through drinking water enriched with natural antioxidants. Improved functional properties of local chicken meat through the provision of drinking water enriched with natural antioxidants. Collaborative Fundamental Research 11. 2024. Performance, Blood Calcium Level, and Macro Mineral Quality of Friesian Holstein Cow Milk Supplemented with Egg Shell Flour Extract as Mineral Source. Collaborative Fundamental Research. 12. 2025. Quality of Nata De Whey Dangke as Functional Food Enriched with Carbon Source in Growth Media. Professor Grant
Industry collaborations over the last 5 years / Kolaborasi dengan industry 5 tahun terakhir	
Patents and proprietary rights / Paten dan HKI	1. Grant: January 20, 2023. Edible Film Compositions Based on Dangke Whey, Casein and Glycerol and Processes for Manufacturing (Regular Patent) 2. Grant: February 17, 2023. Casein Separation Process by Combination of Acid and EDnzyme (Ordinary Patent) 3. Nata formula made from Whey Dangke (pending simple patent certification, based on HKI-3-KI.05.01.08-DS-S00202410523 on Notification of granting simple patent).
Important publications over the last 5 years / Publikasi penting 5 tahun terakhir	1. 2020. Quality of Matoi pasteurized milk subjected to different levels of alginate. IOP Conf. Ser: Earth Environ. Sci. 575 012029. https://iopscience.iop.org/article/10.1088/1755-1315/575/1/012029/pdf. 2. 2020. Senaoris Characterisite of Fermented Whey Beverage Products with Sucrose Percentage. Journal of Agricultural Industrial Technology, Vol 30 no 1 2020. https://journal.ipb.ac.id/index.php/jurnaltin/article/view/31673/20124. 3. 2020. supplementation of matoi (Pometia pinnata) leaf extract and alginate suppresses the growth of Staphylococcus aureus and Escherichia coli in pasteurized milk. IOP Conf. Ser: Earth Environ. Sci. 492 012044.

	https://iopscience.iop.org/article/10.1088/1755-1315/492/1/012044/pdf. 4. 2020. Brightness, elongation and thickness of edible film with sodium caseinate using different types of plasticizers. IOP Conf. Ser: Earth Environ. Sci. 492 012043. https://iopscience.iop.org/article/10.1088/1755-1315/492/1/012043/pdf. 5. 2021. Characteristics of edible films at different casein concentrations. IOP Conf. Ser: Earth Environ. Sci. 788 12115. 6. 2021. Physiochemical properties of kefir using honey concentration. Canrea Journal: Food, Nutrition, and Culinary Technology, vol 2 no 1 7. 2021. Acid type and drying method have different effects on the chemical profile of sodium caseinate. Journal of Quality Control and Food Hazard, 8, pp 28-33. 8. 2021. Characterization and Antimicrobial Activity of Whey Edible Film Composite Enriched with Clove Essential Oil . Tropical Animal Science Journal, September 2021, 44(3):369-376 . DOI: https://doi.org/10.5398/tasj.2021.44.3.369 9. 2022. Effects of drying methods and acidic strength on physicochemical properties of potassium caseinate. Italian Journal of Food Science, 34 (1): 1–12 10. 2023. Effect of Glycerol Plasticizer on Physical Characteristic of Whey-Konjac Film Enriched with Clove Essential Oil. Journal of Food Quality and Hazards Control, 9(4); 226-233 11. 2023. Evaluation Of Characteristics Of Melting Power, Color, And Favorite Ice Cream Combination Of Kefir With Different Percentages Of Purple Sweet Potato (Ipomoea Batatas Var Ayumurasaki). Journal of Pharmaceutical Negative Results, volume 14, special issue 1. 2023.Hal 262-270. 12. 2023. Antioxidant Activity and Physical Characteristics of Pasteurized Goat Milk with the Addition of Lontar Fruit (Borassus flabellifer L.). Journal of Agricultural Industrial Technology, 33 (3), December 2023. 13. 2023. Effect of casein levels on solubility time and antioxidant activity of edible film. <i>AIP Conference Proceedings</i> 2628, 050019 (2023) https://doi.org/10.1063/5.0144011 14. 2023. Investigating the effects of fermentation time on physicochemical properties of commercial liquid milk kefir. <i>AIP Conference Proceedings</i> 2628, 050014 (2023) https://doi.org/10.1063/5.0144008
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	15. 2023.Effects of plasticizer on swelling and color of casein-based edible film. <i>AIP Conference Proceedings</i> 2628, 050020 (2023) https://doi.org/10.1063/5.0144012 16. 2024.Evaluating Physicochemical Properties of Whey-Chia Seed Edible Films for Biodegradable Packaging. <i>Tropical Animal Scinece Journal</i>. December 2024, 47(4):519-528 17. 2024. Antioxidant Activity, Physicochemical Properties of Pasteurized Milk by Red Ginger (<i>Zingiber Officinale</i> Var <i>Rubrum</i>) and Pandan Leaves (<i>Pandanus Amaryllifolius</i>) Addition. <i>Journal of Ecohumanism</i> , Volume: 3, No: 8, pp. 12004 – 12015 ISSN: 2752-6798 (Print) ISSN 2752-6801 (Online) https://ecohumanism.co.uk/joe/ecohumanism DOI: https://doi.org/10.62754/joe.v3i8.5796 18. 2024. Sensory Characteristics of Fermented Dangke Whey Functional Beverage with Different Levels of Honey Addition. <i>Jurnal Ilmu-Ilmu Peternakan (Indonesian Journal of Animal Science)</i>, 35(1): 42-52 19. 2024. Evaluating Green Concentrate on Physiological and Metabolic Blood Profile of <i>Friesian Holstein</i> Cows in Negative Energy Balance. <i>Advances in Animal and Veterinary Sciences</i> , May, Volume 13, Issue
Activities in specialist bodies over the last 5 years / Aktifitas berkaitan dengan bidang keahlian dalam 5 tahun terakhir (contoh: menjadi narasumber, tenaga ahli dll.)	1. Resource person for PPMU-PPUPIK activities Faculty of Animal Husbandry edu-tourism center 2. Resource person for PPMU-PK-M activities Empowerment of livestock women through the introduction of functional food processing technology for livestock products in Padaidi Village, Mattiro Bulu District, Pinrang Regency