

DAFTAR PUSTAKA

- Ali, M. A., Alhasson, F. A., & Shehan, N. A. (2023). Anatomy, Histological, Patho-physiological Comparative Study of Abomasums Disorders in Cows and Buffaloes (A review study). *Central Asian Journal of Medical and Natural Sciences*, 4(5), 653–660.
- Antanaitis, R., Televičius, M., Balčiūnaitė, D., Jatautas, D., Rutkauskas, A., & Stasiulevičiūtė, I. (2018). Impact of Glucocorticoids and Nonsteroidalantiinflammatory Drugs on Milk Yield, Cow Activity, Glucose and Beta-Hydroxybutyrate Concentration in Blood After Omentopexy. *Vet Med Zoot*, 76(98), 11–16.
- Atabany, A., Purwanto, B. P., Toharmat, T., & Anggraeni, A. (2011). The impact of days open on milk performance of friesian holstein cows in Baturraden, Indonesia. *Media Peternakan*, 34(2), 77–82. <https://doi.org/10.5398/medpet.2011.34.2.77>
- Atalay, H. (2019). The effect of serum β -hydroxybutyric acid and calcium levels on left displaced abomasum in Holstein cows on transition period. *Journal of Istanbul Veterinary Sciences*, 3(2), 43–48. <https://doi.org/10.30704/http-www-jivs-net.565605>
- Badan Pangan Nasional. (2025). *Peringatan Hari Susu Nusantara, Pemerintah Upayakan Keseimbangan untuk Penuhi Konsumsi Nasional*. (Siaran Pers No. 216/R-NFA/VI/2025). <https://badanpangan.go.id/blog/post/peringatan-hari-susu-nusantara-pemerintah-upayakan-keseimbangan-untuk-penuhi-konsumsi-nasional>
- Bansod, A. P., Jadhao, A. D., & Surjagade, R. S. (2020). Ketosis in Dairy Animals. *Intas Polivet*, 21(2), 382–385.
- Braun, U., Nuss, K., Reif, S., Hilbe, M., & Gerspach, C. (2022). Left and right displaced abomasum and abomasal volvulus: comparison of clinical, laboratory and ultrasonographic findings in 1982 dairy cows. *Acta Veterinaria Scandinavica*, 64(1). <https://doi.org/10.1186/s13028-022-00656-9>
- Budde, J. A., & Mccluskey, D. M. (2023). *Plumb's Veterinary Drug Handbook 10th Edition*. Wiley-Blackwell.

- Caixeta, L. S., & Omontese, B. O. (2021). Monitoring and improving the metabolic health of dairy cows during the transition period. *Animals*, *11*(2), 1–17. <https://doi.org/10.3390/ani11020352>
- Cascone, G., Licitra, F., Stamilla, A., Amore, S., Dipasquale, M., Salonia, R., Antoci, F., & Zecconi, A. (2022). Subclinical Ketosis in Dairy Herds: Impact of Early Diagnosis and Treatment. *Frontiers in Veterinary Science*, *9*(895468), 1–8. <https://doi.org/10.3389/fvets.2022.895468>
- Chapinal, N., Carson, M. E., LeBlanc, S. J., Leslie, K. E., Godden, S., Capel, M., Santos, J. E. P., Overton, M. W., & Duffield, T. F. (2012). The association of serum metabolites in the transition period with milk production and early-lactation reproductive performance. *Journal of Dairy Science*, *95*(3), 1301–1309. <https://doi.org/10.3168/jds.2011-4724>
- Chick, S., Ataei Kachouei, M., Knowlton, K., & Ali, M. A. (2024). Functionalized Graphene-Based Biosensors for Early Detection of Subclinical Ketosis in Dairy Cows. *ACS Applied Materials and Interfaces*, *16*(39), 51932–51943. <https://doi.org/10.1021/acsami.4c07715>
- Cricleviț, D., Ștefănescu, R., Pavel, G., Aursei, A., Anton, A., Solcan, G., & Borș, S. I. (2025). Left Abomasal Displacement in Dairy Cattle and Associated Metabolic Disturbances. Diagnosis and Treatment. *Rev Rom Med Vet*, *35*(3), 21–26.
- Damayanti, R. L., Hartanto, R., & Sambodho, P. (2020). Hubungan Volume Ambing dan Ukuran Puting dengan Produksi Susu Sapi Perah Friesian Holstein di PT. Naksatra Kejora, Kabupaten Temanggung. *Jurnal Sain Peternakan Indonesia*, *15*(1), 75–83. <https://doi.org/10.31186/jspi.id.15.1.75-83>
- D’Anselme, O., Hartnack, A., Andrade, J. S. S., Alfaro Rojas, C., Ringer, S. K., & de Carvalho Papa, P. (2022). Description of an Ultrasound-Guided Erector Spinae Plane Block and Comparison to a Blind Proximal Paravertebral Nerve Block in Cows: A Cadaveric Study. *Animals*, *12*(17). <https://doi.org/10.3390/ani12172191>
- Delić, B., Belić, B., Cincović, M., Đoković, R., & Lakić, I. (2020). Metabolic adaptation in first week after calving and early prediction of ketosis type I and II in dairy cows. *Large Animal Review*, *26*, 51–55.

- Despal, Faresty, C., Zahera, R., & Toharmat, T. (2022). The Feeding Behavior of Dairy Cattle Under Tropical Heat Stress Conditions at Smallholder Urban Farming. *Biodiversitas*, 23(7), 3771–3777.
- Dey, M. C., Jairath, G., Gadzama, I. U., Alves, S. P., & Ponnampalam, E. N. (2025). Impact of Mixed Rations on Rumen Fermentation, Microbial Activity and Animal Performance: Enhancing Livestock Health and Productivity—Invited Review. *Ruminants*, 5(3), 1–34.
- Durgut, R., Sagkan Ozturk, A., Hasan Ozturk, O., & Guzel, M. (2016). Evaluation of oxidative stress, antioxidant status and lipid profile in cattle with displacement of the abomasum. *Ankara Üniv Vet Fak Derg*, 63.
- Filian, B. V., Santoso, S. A. B., Harjanti, D. W., & Prastiwi, W. D. (2016). Hubungan Paritas, Lingkar Dada dan Umur Kebuntingan dengan Produksi Susu Sapi Friesian Holstein di BBPTU-HPT Baturraden. *Jurnal Agripet*, 16(2), 83–89. <https://doi.org/10.17969/agripet.v16i2.5102>
- Fiore, F., Musina, D., Cocco, R., Di Cerbo, A., & Spissu, N. (2018). Association between left-displaced abomasum corrected with 2-step laparoscopic abomasopexy and milk production in a commercial dairy farm in Italy. *Irish Veterinary Journal*, 71(20), 1–5. <https://doi.org/10.1186/s13620-018-0132-2>
- Gao, J., Gonzalez-Prendes, R., Liu, Y., Kantanen, J., Ginja, C., Ghanem, N., Kugonza, D. R., Makgahlela, M., Bovenhuis, H., Groenen, M. A. M., & Crooijmans, R. P. M. A. (2025). Evidence of early genomic selection in Holstein Friesian across African and European ecosystems. *BMC Genomics*, 26(1). <https://doi.org/10.1186/s12864-025-11828-y>
- Ghazy, A., Gomaa, N., & Nasr, N. (2016). Hematological and Biochemical Evaluation in Holstein-Friesian Cows Before and After Surgical Correction of Left Abomasal Displacement on-Filed Condition. *Alexandria Journal of Veterinary Sciences*, 49(1), 138. <https://doi.org/10.5455/ajvs.224881>
- Gheller, L. S., Wagemann-Fluxá, C. A., & DeVries, T. J. (2024). Accuracy and precision of diets fed to close-up cows on dairy farms and its association with early lactation performance. *Journal of Dairy Science*, 107(12), 10811–10823. <https://doi.org/10.3168/jds.2024-25118>

- Giesteira, A. M., Lima, M. S., & Nunes, T. (2023). One-step laparoscopy-guided abomasopexy versus omentopexy via right flank laparotomy to treat left displaced abomasum in dairy cows, in relation to return of milk yield. *Veterinary Journal*, 296–297. <https://doi.org/10.1016/j.tvjl.2023.105991>
- Grant, R. J., & Ferraretto, L. F. (2018). Silage review: Silage feeding management: Silage characteristics and dairy cow feeding behavior. *Journal of Dairy Science*, 101(5), 4111–4121. <https://doi.org/10.3168/jds.2017-13729>
- Guliński, P. (2021a). Ketone bodies – Causes and effects of their increased presence in cows' body fluids: A review. *Veterinary World*, 14(6), 1492–1503. <https://doi.org/10.14202/vetworld.2021.1492-1503>
- Guliński, P. (2021b). Ketone Bodies – Causes and Effects of Their Increased Presence in Cows' Body Fluids: A Review. *Veterinary World*, 14(6), 1492–1503.
- Ha, S., Kang, S., Han, M., Lee, J., Chung, H., Kim, D., & Park, J. (2021). Therapeutic Effects of Levocarnitine or Vitamin B Complex and E With Selenium on Glycerin-Treated Holstein Friesian Cows With Clinical Ketosis. *Frontiers in Veterinary Science*, 8(773902). <https://doi.org/10.3389/fvets.2021.773902>
- Hendrickson, D. A., & Baird, A. N. (2013). *Turner and McIlwraith's Techniques in Large Animal Surgery 4th Edition*. WILEY Blackwell.
- Hendriks, S. J., Roche, J. R., McArt, J. A. A., Grala, T. M., Turner, S. A., Burke, C. R., Kuhn-Sherlock, B., & Phyn, C. V. C. (2025). The effect of monopropylene glycol on milk production, uterine health, and reproductive performance in cows diagnosed with hyperketonemia on 3 pasture-based dairy farms. *Journal of Dairy Science*, 108(5), 5271–5286. <https://doi.org/10.3168/jds.2024-25208>
- Kaewlamun, W., Grimard, B., Duvaux-Ponter, C., & Ponter, A. A. (2020). Kick-starting ovarian cyclicity by using dietary glucogenic precursors in post-partum dairy cows: a review. In *International Journal of Veterinary Science and Medicine*, 8(1), 39–48. <https://doi.org/10.1080/23144599.2020.1773188>

- Kang, D., Lungu, S. E., Danso, F., Dzou, C. F., Chen, Y., Zheng, X., Nie, F., Lin, H., Chen, J., & Zhou, G. (2025). Animal health and nutrition: metabolic disorders in cattle and improvement strategies. *Frontiers in Veterinary Science*, 12. <https://doi.org/10.3389/fvets.2025.1470391>
- Kavibharathy, S., Sunandhadevi, S., Enbavelan, P., & Venkatesakumar, E. (2025). Bovine ketosis: A comprehensive review on pathophysiology, diagnosis, monitoring strategies, therapeutics, and prevention in dairy cattle. *International Journal of Veterinary Sciences and Animal Husbandry*, 10(8S), 72–82. <https://doi.org/10.22271/veterinary.2025.v10.i8sb.2466>
- Mainau, E., Temple, D., Llonch, P., & Manteca, X. (2022). *Dairy Cattle Welfare in Practice*. 5m.
- Mansour, M., Wilhite, R., Rowe, J., & Hafiz, S. (2023). *Guide to Ruminant Anatomy*. WILEY Blackwell.
- McArt, J. A. A., Nydam, D. V., & Oetzel, G. R. (2012). Epidemiology of subclinical ketosis in early lactation dairy cattle. *Journal of Dairy Science*, 95(9), 5056–5066. <https://doi.org/10.3168/jds.2012-5443>
- Melendez, P., & Serrano, M. V. (2024). Update on ketosis in dairy cattle with major emphasis on subclinical ketosis and abdominal adiposity. In *Veterinary Medicine and Science*, 10(5), 1–12. <https://doi.org/10.1002/vms3.1525>
- Miller-Cushon, E. K., & DeVries, T. J. (2017). Feed sorting in dairy cattle: Causes, consequences, and management. *Journal of Dairy Science*, 100(5), 4172–4183. <https://doi.org/10.3168/jds.2016-11983>
- Mondal, M., Suan, T. K., Gore, P. L., Khandelwal, L., Sharma, R., Karunakaran, M., Mohamed Youssef, H. S., Chakraborty, S., & Akourki, A. (2026). Endocrine–metabolic regulation during the transition period in dairy cows: mechanisms, biomarkers, and emerging diagnostics for subclinical ketosis. *Frontiers in Endocrinology*, 17. <https://doi.org/10.3389/fendo.2026.1799702>
- Mueller, K. (2011). Diagnosis, treatment and control of left displaced abomasum in cattle. In *Practice*, 33(9), 470–481. <https://doi.org/10.1136/inp.d6079>

- Niehaus, A. J. (2016). Surgical Management of Abomasal Disease. *Veterinary Clinics of North America - Food Animal Practice*, 32(3), 629–644. <https://doi.org/10.1016/j.cvfa.2016.05.006>
- Nigussie, T. (2018). A Review on the Role of Energy Balance on Reproduction of Dairy Cow. *Journal Dairy Research Technology*, 1(3), 1–9.
- Orsini, J. A., Grenager, N. S., & de Lahunta, A. (2022). *Comparative Veterinary Anatomy: A Clinical Approach*. Academic Press.
- Pardon, B., Vertenten, G., Cornillie, P., Schauvliege, S., Gasthuys, F., Van Loon, G., & Deprez, P. (2012). Left abomasal displacement between the uterus and rumen during bovine twin pregnancy. *Journal of Veterinary Science*, 13(4), 437–440. <https://doi.org/10.4142/jvs.2012.13.4.437>
- Plaizier, J. C., Mesgaran, M. D., Derakhshani, H., Golder, H., Khafipour, E., Kleen, J. L., Lean, I., Loor, J., Penner, G., & Zebeli, Q. (2018). Review: Enhancing gastrointestinal health in dairy cows. In *Animal*, 12, (s2), S399–S418. <https://doi.org/10.1017/S1751731118001921>
- Plemyashov, K., Krutikova, A., Belikova, A., Kuznetsova, T., & Semenov, B. (2024). Genome-Wide Association Study (GWAS) for Left Displaced Abomasum in Highly Productive Russian Holstein Cattle. *Animals*, 14(19), 1–13. <https://doi.org/10.3390/ani14192795>
- Rana, T. (2025). *Periparturient Diseases of Cattle* (T. Rana, Ed.). Wiley Blackwell.
- Rizwan, M., Jan Muhammad, A., Pakistan Hadia Mubeen, M., Awais, M., Saeed, Z., Pakistan Muhammad Khurram, M., & Pakistan Nargis Ambreen, M. (2026). Left Displaced Abomasum in Dairy Cattle: Current Concepts in Pathogenesis, Diagnosis, and Therapeutic Strategies. *Advance Social Science Archive Journal*, 5(01), 2596–2607. <https://doi.org/10.5281/zenodo.19336287>
- Siska, I., & Anggrayni, Y. L. (2021). Body Condition Score (BCS), Tingkat Laktasi dan Hubungannya dengan Produksi Susu Sapi Perah Peranakan Friesian Holstein (PFH). *Jurnal Ilmu Ternak Universitas Padjadjaran*, 20(2), 115–125. <https://doi.org/10.24198/jit.v20i2.30922>

- Song, Y., Loor, J. J., Zhao, C., Huang, D., Du, X., Li, X., Wang, Z., Liu, G., & Li, X. (2020). Potential hemo-biological identification markers to the left displaced abomasum in dairy cows. *BMC Veterinary Research*, 16(1). <https://doi.org/10.1186/s12917-020-02676-x>
- Sova, A. D., LeBlanc, S. J., McBride, B. W., & DeVries, T. J. (2013). Associations between herd-level feeding management practices, feed sorting, and milk production in freestall dairy farms. *Journal of Dairy Science*, 96(7), 4759–4770. <https://doi.org/10.3168/jds.2013-6679>
- Sutarno, & Setyawan, A. D. (2015). Review: Genetic diversity of local and exotic cattle and their crossbreeding impact on the quality of Indonesian cattle. *Biodiversitas*, 16(2), 327–354. <https://doi.org/10.13057/biodiv/d160230>
- Suthar, V. S., Canelas-Raposo, J., Deniz, A., & Heuwieser, W. (2013). Prevalence of subclinical ketosis and relationships with postpartum diseases in European dairy cows. *Journal of Dairy Science*, 96(5), 2925–2938. <https://doi.org/10.3168/jds.2012-6035>
- Triwutanon, S., & Rukkwamsuk, T. (2021). Factors Associated With Negative Energy Balance in Periparturient Dairy Cows Raised Under Tropical Climate of Thailand—A Mini Review. *Journal of Advanced Veterinary And Animal Research*, 8(3), 378–387.
- Tschoner, T., Zablotzki, Y., & Feist, M. (2022). Retrospective Evaluation of Method of Treatment, Laboratory Findings, and Concurrent Diseases in Dairy Cattle Diagnosed with Left Displacement of the Abomasum during Time of Hospitalization. *Animals*, 12(13), 1–16. <https://doi.org/10.3390/ani12131649>
- Tufarelli, V., Puvača, N., Glamočić, D., Pugliese, G., & Colonna, M. A. (2024). The Most Important Metabolic Diseases in Dairy Cattle during the Transition Period. In *Animals* (Vol. 14, Number 5). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/ani14050816>
- Uyarlar, C., Cetingul, S., Gültepe, E. E., Sial, A. R., & Bayram, İ. (2018). Effects of Subclinical and Clinical Ketosis on The Incidence of Mastitis, Metritis, Culling Rate and Some Hematological Parameters in Dairy Cows. *Kocatepe Veterinary Journal*, 11(2), 186–193. <https://doi.org/10.30607/kvj.419839>

- VandeHaar, M. J., Armentano, L. E., Weigel, K., Spurlock, D. M., Tempelman, R. J., & Veerkamp, R. (2016). Harnessing the genetics of the modern dairy cow to continue improvements in feed efficiency. *Journal of Dairy Science*, 99(6), 4941–4954. <https://doi.org/10.3168/jds.2015-10352>
- Vanholder, T., Papen, J., Bemers, R., Vertenten, G., & Berge, A. C. B. (2015). Risk factors for subclinical and clinical ketosis and association with production parameters in dairy cows in the Netherlands. *Journal of Dairy Science*, 98(2), 880–888. <https://doi.org/10.3168/jds.2014-8362>
- Wankhade, P. R., Manimaran, A., Kumaresan, A., Jeyakumar, S., Ramesha, K. P., Sejian, V., Rajendran, D., & Varghese, M. R. (2017). *Metabolic and immunological changes in transition dairy cows: A review*. <https://doi.org/10.14202/vetworld.2017>
- Webster, J. (2020). *Understanding the Dairy Cow*. WILEY Blackwell.
- Weng, X., Zhao, W., Neethirajan, S., & Duffield, T. (2015). Microfluidic Biosensor for β -Hydroxybutyrate (β HBA) Determination of Subclinical Ketosis Diagnosis. *Journal of Nanobiotechnology*, 13(13), 1–8.
- White, H. M. (2015). The role of TCA cycle anaplerosis in ketosis and fatty liver in periparturient dairy cows. *Animals*, 5(3), 793–802. <https://doi.org/10.3390/ani5030384>
- Yong, K., Luo, Z., Yang, Q., Zhang, C., & Cao, S. (2025). Analysis of the incidence and treatment of left displaced abomasum on a dairy farm in Southwest China from 2018 to 2023: a retrospective study. *Large Animal Review*, 31(2), 113–119.
- Zerbin, I., Lehner, S., & Distl, O. (2015). Genetics of bovine abomasal displacement. *Veterinary Journal*, 204(1), 17–22. <https://doi.org/10.1016/j.tvjl.2015.02.013>
- Zhang, F., Nan, X., Wang, H., Zhao, Y., Guo, Y., & Xiong, B. (2020). Effects of Propylene Glycol on Negative Energy Balance of Postpartum Dairy Cows. *Animals*, 10(1), 1–15.
- Zhang, G., & Ametaj, B. N. (2020). Ketosis an Old Story Under a New Approach. *Dairy*, 1(1), 42–60. <https://doi.org/10.3390/dairy1010005>

Zhang, Y., Wang, C., Khan, M. Z., Ju, Z., & Huang, J. (2025). Current Understanding of Bovine Ketosis: From Molecular Basis to Farm-Level Management. *Animals*, 15(24), 1–41. <https://doi.org/10.3390/ani15243644>