

DAFTAR PUSTAKA

- Abbas, A. K., Lichtman, A. H., & Pillai, S. (2021). *Cellular and Molecular Immunology* (10th ed.). Elsevier.
- Abbas, U., Iqbal, K., Khan, A., Irfan, M., Saifullah, N., Jamil, B., & Hasan, Z. (2022). Journal of Clinical Tuberculosis and Other Mycobacterial Diseases Tuberculosis and diabetes mellitus : Relating immune impact of co-morbidity with challenges in disease management in high burden countries. *Journal of Clinical Tuberculosis and Other Mycobacterial Diseases*, 29(November), 100343. <https://doi.org/10.1016/j.jctube.2022.100343>
- Alemu, A., Bitew, Z. W., Diriba, G., Seid, G., Eshetu, K., Chekol, M. T., Berhe, N., & Gumi, B. (2022). International Journal of Infectious Diseases Tuberculosis incidence in patients with chronic kidney disease : a systematic review and meta-analysis . ☆. *International Journal of Infectious Diseases*, 122, 188–201. <https://doi.org/10.1016/j.ijid.2022.05.046>
- Badpeyma, M., Sedaghat, A., Moghaddam, A. B., & Khadem-rezaiyan, M. (2025). *The efficacy of high-protein nutritional support on mortality , clinical outcomes , and nutritional adequacy in critically ill patients : a double - center randomized controlled trial*. 1–13.
- Baik, S. M., Kim, M., & Lee, J. G. (2025). *Comparison of Early Enteral Nutrition Versus Early Parenteral Nutrition in Critically Ill Patients : A Systematic Review and Meta-Analysis*.
- Blanco, M. N. F., Nicolas, M., Blanco, F., Belderbos, M., & Vormoor, H. J. (2023). *Leukemia suppressing normal bone marrow : how long does it last ? November*, 2891–2893.
- Bothamley, G. H. (2021). *Male Sex Bias in Immune Biomarkers for Tuberculosis*. 12(March). <https://doi.org/10.3389/fimmu.2021.640903>
- CDC. (2025). *Clinical Overview of Tuberculosis Disease*. <https://www.cdc.gov/tb/hcp/clinical-overview/tuberculosis-disease.html>
- Chedid, C., Kokhraidze, E., Tukvadze, N., Banu, S., Delogu, G., Endtz, H., Ader, F., Goletti, D., & Hoffmann, J. (2020). *International Journal of Infectious Diseases Association of baseline white blood cell counts with tuberculosis treatment outcome : a prospective multicentered cohort study*. 100, 199–206. <https://doi.org/10.1016/j.ijid.2020.09.017>
- Chen, Q., Che, Y., Xiao, Y., Jiang, F., Chen, Y., & Zhou, J. (2021). *Impact of Multimorbidity Subgroups on the Health Care Use and Clinical Outcomes of Patients With Tuberculosis : A Population-Based Cohort Analysis*. 9(October), 1–10. <https://doi.org/10.3389/fpubh.2021.756717>
- Christensen, M., & Liang, M. (2023). International Journal of Nursing Sciences Critical care : A concept analysis. *International Journal of Nursing Sciences*, 10(3), 403–413. <https://doi.org/10.1016/j.ijnss.2023.06.020>

- Compher, C., McKeever, L., Pharmed, A. L. B., McCall, M., Braunschweig, C., & Rice, T. W. (2022). *Guidelines for the provision of nutrition support therapy in the adult critically ill patient : The American Society for Parenteral and Enteral Nutrition* Jayshil Patel MD 5. 12–41. <https://doi.org/10.1002/jpen.2267>
- Dinkes Jatim. (2024). *Profil Kesehatan Jawa Timur Tahun 2024*. 1–565. <https://dinkesjatim.org/blog-dinkes/>
- Dinkes Surabaya. (2025). *Data dan proyeksi kasus TB Kota Surabaya*. <https://www.suarasurabaya.net/kelanakota/2025/pemkot-surabaya-prediksi-temuan-tbc-2025-capai-16-ribuan-kasus/>
- Direktur RSUD Haji Surabaya. (2016). *Panduan Pemberian Nutrisi Critical ILL* (pp. 1–13).
- Dresen, E., Weißbrich, C., Fimmers, R., Putensen, C., & Stehle, P. (2021). Medical high-protein nutrition therapy and loss of muscle mass in adult ICU patients : A randomized controlled trial. *Clinical Nutrition*, 40(4), 1562–1570. <https://doi.org/10.1016/j.clnu.2021.02.021>
- Gassel, R. J. J. Van, & Baggerman, M. R. (2020). *Metabolic aspects of muscle wasting during critical illness*. 23(2). <https://doi.org/10.1097/MCO.0000000000000628>
- Gunasekaran, H., Ranganathan, U. D., & Bethunaickan, R. (2025). *The importance of inflammatory biomarkers in detecting and managing latent tuberculosis infection. February*, 1–14. <https://doi.org/10.3389/fimmu.2025.1538127>
- Gupta, M., Srikrishna, G., Klein, S., & Bishai, W. R. (2023). *immune responses in tuberculosis*. 43(8), 640–656. <https://doi.org/10.1016/j.it.2022.06.004>. Genetic
- Hall, J. E., & Hall, M. E. (2025). *GUYTON AND HALL TEXTBOOK OF MEDICAL PHYSIOLOGY* (15th ed.). Elsevier Ltd.
- Hamada, Y., Quartagno, M., Law, I., Malik, F., Bonsu, A., Adetifa, I. M. O., & Adusi-poku, Y. (2023). *Articles Association of diabetes , smoking , and alcohol use with subclinical-to-symptomatic spectrum of tuberculosis in 16 countries : an individual participant data meta-analysis of national tuberculosis prevalence surveys*. 63, 1–13. <https://doi.org/10.1016/j.eclinm.2023.102191>
- Harahap, R. I. M., Tristina, N., Rostini, T., & Suraya, N. (2022). Prevalensi Hipokalemia dan Hiponatremia pada Pasien Tuberkulosis Multidrug Resistence di RS. Hasan Sadikin Bandung. *Medika Kartika : Jurnal Kedokteran Dan Kesehatan*, 5(1), 12–20.
- Harris, S., Depalma, J., & Barkoukis, H. (2025). *Protein and Aging : Practicalities and Practice*.
- Hidayat, A. A. A. (2024). *Metode Penelitian Kesehatan: Paradigma Kuantitatif*. Health Books Publishing.
- Hruby, A., & Jacques, P. F. (2019). Dietary Protein and Changes in Biomarkers of

- Inflammation and Oxidative Stress in the Framingham Heart Study Offspring Cohort. *Nutritional Epidemiology and Public Health*, 1, 1–9.
- Kayambankadzanja, R. K., Schell, C. O., Wärnberg, M. G., Tamras, T., & Mollazadegan, H. (2022). *Towards definitions of critical illness and critical care using concept analysis*. 1–11. <https://doi.org/10.1136/bmjopen-2022-060972>
- Kemenkes RI. (2022). *Mengenal ruang perawatan khusus ICU dan jenis-jenisnya. Direktorat Jenderal Kesehatan Lanjutan*. https://keslan.kemkes.go.id/view_artikel/1713/mengenal-lebih-dekat-ruang-perawatan-khusus-icu-apa-saja-jenis-jenisnya?
- Kemenkes RI. (2025). *Indonesia's movement to end tuberculosis: Data dan capaian program TB nasional*. <https://kemkes.go.id/eng/indonesias-movement-to-end-tb>
- Kinyi, H. W., Drago, C. K., Ochola, L., & Kiwanuka, G. N. (2025). *High-protein diets reduce plasma pro-inflammatory cytokines following lipopolysaccharide challenge in Swiss Albino mice*. 1–17. <https://doi.org/10.1371/journal.pone.0338588>
- Kusumawati, K., & Sistiyono. (2025). *LEUKOSIT DAN LIMFOSIT DALAM TUBERKULOSIS: PRESPEKTIF*. 13(1).
- Lai, R., Williams, T., Lee, J., & Behar, S. M. (2024). *Heterogeneity in lung macrophage control of Mycobacterium tuberculosis is modulated by T cells. Mdm*. <https://doi.org/10.1038/s41467-024-48515-7>
- Lauwrhetta, M. N., & Harti, L. B. (2024). *Hubungan Asupan Protein terhadap Jumlah Leukosit pada pasien ICU di RSUD Dr. Saiful Anwar Provinsi Jawa Timur yang mendapatkan Enteral Feeding*. <https://repository.ub.ac.id/id/eprint/221621>
- Lee, H. R., Yoo, E. J., Choi, H., Han, K., Jung, J. H., Park, J., Lee, H., & Shin, D. W. (2022). Tuberculosis and Risk of Ischemic Stroke : A Nationwide Cohort Study. *Clinical and Population Science*, November, 3401–3409. <https://doi.org/10.1161/STROKEAHA.122.039484>
- Li, M., Chen, T., Hua, Z., Yan, H., Wang, D., Li, Z., Kang, Y., & Zhu, N. (2021). Global , regional , and national prevalence of diabetes mellitus in patients with pulmonary tuberculosis : a systematic review and meta - analysis. *Diabetology & Metabolic Syndrome*, 1–8. <https://doi.org/10.1186/s13098-021-00743-3>
- Li, X., Zhong, Z., Liu, Y., Gong, G., Zhang, Y., Wang, Y., Liu, C., & Wang, Q. (2022). *Dietary pattern characterized by a balanced diet rich in high-quality protein intake is associated with mild initial clinical manifestations in tuberculosis. August*. <https://doi.org/10.3389/fnut.2022.912703>
- Ling, Z., Jiang, Y., Ru, J., Lu, J., Ding, B., & Wu, J. (2023). *Amino acid metabolism in health and disease. June*. <https://doi.org/10.1038/s41392-023-01569-3>
- Liu, C., He, L., Zhang, J. H., He, J., Tian, L., & Zheng, X. (2024). *Impact of high-*

protein enteral nutrition on muscle preservation in mechanically ventilated patients with severe pneumonia : a randomized controlled trial. 0.

- Liu, Q., Tang, D., Xiang, X., & He, J. (2022). *Associations between nutritional and immune status and clinicopathologic factors in patients with tuberculosis : A comprehensive analysis.* November, 1–10.
<https://doi.org/10.3389/fcimb.2022.1013751>
- Looi, K., Matsui, Y., Kono, M., Samudi, C., Kojima, N., Xu, J., Aun, C., Siang, C., Hao, P., Tan, Y., Shamnugam, H., Devi, S., Faridah, S., Omar, S., Chai, L., & Lum, S. (2021). International Journal of Infectious Diseases Evaluation of immature platelet fraction as a marker of dengue fever progression. *International Journal of Infectious Diseases*, 110, 187–194.
<https://doi.org/10.1016/j.ijid.2021.07.048>
- Lu, C., Xu, Y., Li, X., Wang, M., Xie, B., Huang, Y., Li, Y., & Fan, J. (2024). *Nutritional status affects immune function and exacerbates the severity of pulmonary tuberculosis.* July, 1–12.
<https://doi.org/10.3389/fimmu.2024.1407813>
- Luczynski, P., Holmes, T., Romanowski, K., Arbiv, O. A., Cook, V. J., Clark, E. G., & Johnston, J. C. (2023). Risk of Tuberculosis Disease in People With Chronic Kidney Disease Without Kidney Failure : A Systematic Review and Meta-analysis. *Clinical Infectious Diseases*, 77(8), 1194–1200.
<https://doi.org/10.1093/cid/ciad364>
- McNeil, J. B., Jackson, K. E., Wang, C., Siew, E. D., Vincz, A. J., Shaver, C. M., Bastarache, J. A., & Ware, L. B. (2021). Linear Association Between Hypoalbuminemia and Increased Risk of Acute Respiratory Distress Syndrome in Critically Ill Adults. *Critical Care Explorations*, 3, 1–10.
<https://doi.org/10.1097/CCE.0000000000000527>
- Mohamed, M. A., Doleman, B., Phillips, B. E., & Williams, J. P. (2025). *The Effects of Protein Nutrition on Muscle Function in Critical Illness : A Systematic Review and Meta-Analysis. 1*, 1–15.
- Peer, V., Schwartz, N., & Green, M. S. (2023). *Gender differences in tuberculosis incidence rates — A pooled analysis of data from seven high-income countries by age group and time period.*
- Permenkes. (2022). *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 40 TAHUN 2022 TENTANG PERSYARATAN TEKNIS BANGUNAN, PRASARANA, DAN PERALATAN KESEHATAN RUMAH SAKIT. 1309*, 1–290.
- Potter, P. A., Perry, A. G., Stockert, P. A., Hall, A., & Ostendorf, W. A. (2025). *Fundamental of Nursing.* Elsevier Ltd.
<https://shop.elsevier.com/books/fundamentals-of-nursing/potter/978-0-443-12406-8>
- Puspasari, S. F. A. (2025). Effectiveness of a High-Protein Diet on the Nutritional Status of Pulmonary Tuberculosis Patients at Pandak I Public Health Centre.

- The Malaysian Journal of Nursing*, 17(October), 208–216.
<https://doi.org/10.31674/mjn.2025.v17i02.020>
- Puspitasari, S., Yurman, Anwar, E. N., & Hayati, I. (2025). GAMBARAN JUMLAH LEUKOSIT PADA PASIEN TUBERKULOSIS PARU DI RSUD dr. M. YUNUS BENGKULU. *Jurnal Medika*, 10, 7–11.
<https://doi.org/10.53861/jmed.v10i1.591>
- Putri, N. Z. S., Pratama, S. A., Dini, C. Y., & Gusrianto, W. A. (2025). Hubungan Asupan Zat Gizi Makro dengan Status Gizi Pasien Rawat Jalan Tuberkulosis Paru di RSUD Haji Provinsi Jawa Timur. *JGK*, 17(2), 147–158.
- Sakuraya, M., Okano, H., Masuyama, T., Kimata, S., & Hokari, S. (2021). Efficacy of non - invasive and invasive respiratory management strategies in adult patients with acute hypoxaemic respiratory failure : a systematic review and network meta - analysis. *Critical Care*, 1–16. <https://doi.org/10.1186/s13054-021-03835-8>
- Sershen, C. L., Salim, T., & May, E. E. (2023). *Investigating the comorbidity of COPD and tuberculosis , a computational study*. February, 1–15.
<https://doi.org/10.3389/fsysb.2023.940097>
- Singer, P., Bendavid, I., Benarie, I., Stadlander, L., & Kagan, I. (2021). Feasibility of achieving different protein targets using a hypocaloric high - protein enteral formula in critically ill patients. *Critical Care*, 1–9.
<https://doi.org/10.1186/s13054-021-03625-2>
- Singer, P., Reintam, A., Berger, M. M., Calder, P. C., Casaer, M., Hiesmayr, M., Mayer, K., Montejo-gonzalez, J. C., Pichard, C., Preiser, J., Szczeklik, W., Zanten, A. R. H. Van, & Bischoff, S. C. (2023). ESPEN Guideline ESPEN practical and partially revised guideline : Clinical nutrition in the intensive care unit. *Clinical Nutrition*, 42(9), 1671–1689.
<https://doi.org/10.1016/j.clnu.2023.07.011>
- Sinha, P., Lönnroth, K., Bhargava, A., Heysell, S. K., Sarkar, S., Salgame, P., Rudgard, W., Boccia, D., Aartsen, D. Van, & Hochberg, N. S. (2021). *Food for thought: addressing undernutrition to end TB*. 21(10), 1–14.
[https://doi.org/10.1016/S1473-3099\(20\)30792-1](https://doi.org/10.1016/S1473-3099(20)30792-1)
- Solomou, E. E., Salamaliki, C., & Lagadinou, M. (2021). *How to Make the Right Diagnosis in Neutropenia*. 3, 41–46.
- Sugiyono. (2023). *METODE PENELITIAN KUANTITATIF, KUALITATIF, DAN R&D* (M. Dr. Ir. Sutopo. S.Pd (ed.)). ALFABETA, cv.
- Syahrir, Ninef, V. I., Agus, D., Putri, V., & Suluamu, M. (2025). The Role of Nurses in Improving Medication Adherence Among Pulmonary Tuberculosis Patients : A Phenomenological Study. *Journal of Indogenius*, 4(2), 301–308.
<https://doi.org/10.56359/igj.v4i2.585>
- Wang, Y., Ye, Y., Xuan, L., Xu, L., Wang, P., Ma, J., Wang, Y., Chen, Y., Miao, J., Wang, W., & Zhou, L. (2024). *Impact of early high protein intake in critically ill patients : a randomized controlled trial*. 1–10.

- Wasyluk, W., & Zwolak, A. (2021). *Metabolic Alterations in Sepsis*. 1–18. <https://doi.org/https://doi.org/10.3390/jcm10112412>
- WHO. (2022). *WHO consolidated guidelines on tuberculosis. Module 4: treatment - drug-susceptible tuberculosis treatment*.
- WHO. (2023). *Global Tuberculosis Report 2023*.
- WHO. (2025a). *WHO operational handbook on tuberculosis. Module 4: treatment and care*.
- WHO. (2025b). *World health statistics 2025*.
- Wiedermann, C. J. (2021). *Hypoalbuminemia as Surrogate and Culprit of Infections*.
- Wischmeyer, P. E. (2024). *Parenteral nutrition in clinical practice : International challenges and strategies*. 81, 89–101.
- Yusran, A. (2023). *HUBUNGAN JUMLAH LEUKOSIT, NEUTROFIL , LIMFOSIT, DAN NEUTROFIL LIMFOSIT RASIO (NLR) SEBAGAI BIOMARKER TINGKAT DETEKSI KUMAN DENGAN TES CEPAT MOLEKULER PADA PASIEN TUBERKULOSIS PARU*.

