

DAFTAR PUSTAKA

- (NCEP), N. C. E. P. (2001). *Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III): At-a-Glance Guide*.
- Abdel-Moneim, A., Abdel-Reheim, E. S., Semmler, M., & Addaleel, W. (2019). The impact of glycemic status and metformin administration on red blood cell indices and oxidative stress in type 2 diabetic patients. *Malaysian Journal of Medical Sciences*, 26(4), 47–60. <https://doi.org/10.21315/mjms2019.26.4.6>
- ADA. (2023). Standards of Care in Diabetes-2023 Abridged for Primary Care Providers American Diabetes Association. *American Diabetes Association*, 41(1), 1–28.
- Adli, F. K. (2021). Diabetes Melitus Gestasional : Diagnosis dan Faktor Risiko. *Jurnal Medika Utama*, 03(01), 1545–1551.
- Apostolova, N., Iannantuoni, F., Gruevska, A., Muntane, J., Rocha, M., & Victor, V. M. (2020). *Mechanisms of action of metformin in type 2 diabetes: Effects on mitochondria and leukocyte-endothelium interactions*. 34(December 2019).
- Arkew, M., Yemane, T., Mengistu, Y., & Gemechu, K. (2021). *Hematological parameters of type 2 diabetic adult patients at Debre Berhan Referral Hospital , Northeast Ethiopia : A comparative cross-sectional study*. 1–15. <https://doi.org/10.1371/journal.pone.0253286>
- Association, A. D. (2025). Pharmacologic Approaches to Glycemic Treatment : Standards of Care in Diabetes — 2025. *Diabetes Care*, 48(Supplement 1), 181–206. <https://doi.org/10.2337/dc25-S015>
- Azhar, M., Alasmari, M. S., Zamir, A., Saeed, H., Alqahtani, F., Ahmad, T., & Rasool, M. F. (2025). *The Clinical Pharmacokinetics and Pharmacodynamics of Glimepiride — A Systematic Review and Meta-Analysis*. 1–26.
- Bambo, G. M., Asmelash, D., Alemayehu, E., Gedefie, A. ., Duguma, T. ., & Kebede, S. S. (2024). *Changes in selected hematological parameters in patients with type 1 and type 2 diabetes : a systematic review and*. 57(February). <https://doi.org/10.3389/fmed.2024.1294290>
- Biadgo, B., Melku, M., Abebe, S. M., & Abebe, M. (2016). *Hematological indices and their correlation with fasting blood glucose level and anthropometric measurements in type 2 diabetes mellitus patients in Gondar , Northwest Ethiopia*. 91–99.

- Cameron, A. R., Morrison, V. L., Levin, D., Mohan, M., Forteath, C., Beall, C., Mcneilly, A. D., Balfour, D. J. K., Savinko, T., Wong, A. K. F., Viollet, B., Sakamoto, K., Fagerholm, S. C., Foretz, M., Lang, C. C., & Rena, G. (2016). *Anti-Inflammatory Effects of Metformin Irrespective of Diabetes Status*. 652–665. <https://doi.org/10.1161/CIRCRESAHA.116.308445>
- Chen, X., Xie, N., Feng, L., Huang, Y., Wu, Y., Zhu, H., Tang, J., & Zhang, Y. (2025). *Oxidative stress in diabetes mellitus and its complications : From pathophysiology to therapeutic strategies*. 138(1).
- DeFronzo, R. A., Ferrannini, E., Zimmet, P., & Alberti, G. (2023). Type 2 Diabetes Mellitus. In K. R. Feingold, B. Anawalt, A. Boyce, & E. Al. (Eds.), *Endotext*. MDText.com, Inc. <https://www.ncbi.nlm.nih.gov/books/NBK513253/>
- Demissie, B. M., Girmaw, F., Amena, N., & Ashagrie, G. (2024). Prevalence of metabolic syndrome and associated factors among patient with type 2 diabetes mellitus in Ethiopia, 2023: asystematic review and meta analysis. *BMC Public Health*, 24(1), 1–10. <https://doi.org/10.1186/s12889-024-18580-0>
- Diniah, M. N., & Suharjono, S. (2025). Efektifitas dan Keamanan Terapi Sodium Glucose Co-transporter 2 (SGLT2) Inhibitor pada Gagal Jantung: Narrative Literatur Review. *Jurnal Farmasi Sains Dan Terapan*, 12(1), 1–9. <https://doi.org/10.33508/jfst.v12i1.5866>
- Donnelly, L. A., Dennis, J. M., Coleman, R. L., Sattar, N., Hattersley, A. T., Holman, R. R., & Pearson, E. R. (2020). Risk of anemia with metformin use in type 2 diabetes: A mastermind study. *Diabetes Care*, 43(10), 2493–2499. <https://doi.org/10.2337/dc20-1104>
- Fahed, G., Aoun, L., Zerdan, M. B., Allam, S., Zerdan, M. B., Bouferraa, Y., & Assi, H. I. (2022). Metabolic Syndrome: Updates on Pathophysiology and Management in 2021. *International Journal of Molecular Sciences*, 23(2). <https://doi.org/10.3390/ijms23020786>
- Foretz, M., Guigas, B., & Viollet, B. (2023). Metformin : update on mechanisms of action and repurposing potential. *Nature Reviews Endocrinology*, 19(8), 460–476. <https://doi.org/10.1038/s41574-023-00833-4>
- Foretz, M., Guigas, B., Viollet, B., Descartes, P., & Cit, S. P. (2019). Understanding the glucoregulatory mechanisms of metformin in type 2 diabetes mellitus. *Nature Reviews Endocrinology*, 15(10), 1–50. <https://doi.org/10.1038/s41574-019-0242-2>
- Galicia-garcia, U., Benito-vicente, A., Jebari, S., & Larrea-sebal, A. (2020). *Costus ignus: Insulin plant and it's preparations as remedial approach*

- for diabetes mellitus. *International Journal of Molecular Sciences*, 1–34.
- Gao, L., Ran, X., Liu, X., Shen, X., & Chen, S. (2023). *The effects of daily dose and treatment duration of metformin on the prevalence of vitamin B12 deficiency and peripheral neuropathy in Chinese patients with type 2 diabetes mellitus : A multicenter cross-sectional study*. October 2022, 765–776. <https://doi.org/10.1111/1753-0407.13428>
- Hamooya, B. M., Siame, L., & Muchaili, L. (2025). *Metabolic syndrome : epidemiology , mechanisms , and current therapeutic approaches*. September, 1–23. <https://doi.org/10.3389/fnut.2025.1661603>
- Hashim, W., Yasin, Y., Muter, E., & Khalil, Y. (2023). Effects of Glimepiride on Diabetic Rats. *Advancements in Life Science*, 10(1). <https://doi.org/10.62940/als.v10i1.1595>
- Hong, A. R., & Lim, S. (2015). *Clinical characteristics of metabolic syndrome in Korea , and its comparison with other Asian countries*. 6(5), 508–515. <https://doi.org/10.1111/jdi.12313>
- Hrncir, T. (2022). Gut Microbiota Dysbiosis: Triggers, Consequences, Diagnostic and Therapeutic Options. *Microorganisms*, 10(3). <https://doi.org/10.3390/microorganisms10030578>
- Husain, A., Khan, H. S., Siddiqi, S. S., & Mukherjee, A. (2022). *Effect of metformin on serum vitamin B12 and red blood cell indices in North Indian subjects with diabetes mellitus*. 9(2), 117–123.
- Hussein, H. A., Elmagzoub, F.-E. A., Babikir, D. M., & Samaan, M. A. (2021a). the Effect of Metformin and Glimepiride on Platelet Count and Indices Among Diabetic Patients Were Attending Jaber Abu Aliz Diabetic Center in Khartoum State. *Journal of Biomedical and Pharmaceutical Research*, 10(1), 93–98. <https://doi.org/10.32553/jbpr.v10i1.846>
- Hussein, H. A., Elmagzoub, F.-E. A., Babikir, D. M., & Samaan, M. A. (2021b). The Effect of Metformin and Glimepiride on Platelet Count and Indices among Diabetic Patients Were Attending Jaber Abu Aliz Diabetic Center in Khartoum State. *Journal of Biomedical and Pharmaceutical Research*, 10(1), 93–98. <https://doi.org/10.32553/jbpr.v10i1.846>
- International Diabetes Federation. (2021). *IDF Diabetes Atlas, 10^a ed.* www.diabetesatlas.org
- Karbalaee-hasani, A., Khadive, T., Eskandari, M., Shahidi, S., Mosavi, M., Nejadebrahimi, Z., Khalkhali, L., Sangdari, A., Mohammadi, D., & Koushki, M. (2021). *Effect of Metformin on Circulating Levels of*

Inflammatory Markers in Patients With Type 2 Diabetes : A Systematic Review and Meta-analysis of Randomized Controlled Trials.
<https://doi.org/10.1177/1060028020985303>

Kelem, A., Shiferaw, E., & Adane, T. (2023). Hematological abnormalities and associated factors among metabolic syndrome patients at the University of Gondar comprehensive specialized hospital, Northwest Ethiopia. *PLoS ONE*, 18(5 May), 1–22.
<https://doi.org/10.1371/journal.pone.0286163>

Kementerian Kesehatan Republik Indonesia. (2023). Laporan Nasional Survei Kesehatan Indonesia (SKI) 2023. In *Badan Kebijakan Pembangunan Kesehatan, Kementerian Kesehatan RI*.

Keohane, E. M., Otto, C. N., & Walenga, J. M. (2020). *Rodak's Hematology : Clinical Principles and Applications* (6th ed.). Elsevier.

Khiaolaongam, W., Boonyapranai, K., Sidthipol, J., & Thaveethaptaikul, P. (2025). *Bifidobacterium animalis subsp . lactis TISTR 2591 Improves Glycemic Control and Immune Response in Adults with Type 2 Diabetes Mellitus : A Randomized , Double-Blind , Placebo-Controlled Crossover Clinical Trial*. 1–18.

Kulkarni, P. G., Mohire, V. M., Bhaisa, P. K., Joshi, M. M., Puranik, C. M., Waghmare, P. P., & Banerjee, T. (2023). Mitofusin-2: Functional switch between mitochondrial function and neurodegeneration. *Mitochondrion*, 69(1), 116–129.
<https://doi.org/10.1016/j.mito.2023.02.001>

Kumar, S. D., Ghosh, J., Ghosh, S., & Eswarappa, S. M. (2025). Emerging concepts in the molecular cell biology and functions of mammalian erythrocytes. *Journal of Biological Chemistry*, 301(4), 108331.
<https://doi.org/10.1016/j.jbc.2025.108331>

Lestari, Zulkarnain, Sijid, & Aisyah, S. (2021). Diabetes Melitus: Review Etiologi, Patofisiologi, Gejala, Penyebab, Cara Pemeriksaan, Cara Pengobatan dan Cara Pencegahan. *UIN Alauddin Makassar*, 1(2), 237–241. <http://journal.uin-alauddin.ac.id/index.php/psb>

Loscalzo, J., Fauci, A. S., Kasper, D. L., Hauser, S. L., Longo, D. L., & Jameson, J. L. (Eds.). (2022). *Harrison's Principles of Internal Medicine* (21st ed.). McGraw Hill.

Lucier, J., & Mathias, P. M. (2024). Type 1 Diabetes. In *StatPearls*. StatPearls Publishing.
<https://www.ncbi.nlm.nih.gov/books/NBK507713/>

Lv, W., Wang, X., Xu, Q., & Lu, W. (2020). Mechanisms and Characteristics of Sulfonylureas and Glinides. *Current Topics in*

- Medicinal Chemistry*, 20, 37–56.
<https://doi.org/10.2174/1568026620666191224141617>
- Mansour, A., Mousa, M., Abdelmannan, D., Tay, G., Hassoun, A., & Alsafar, H. (2023). Microvascular and macrovascular complications of type 2 diabetes mellitus: Exome wide association analyses. *Frontiers in Endocrinology*, 14(March), 1–11.
<https://doi.org/10.3389/fendo.2023.1143067>
- Maratni, N. P. . (2016). Hubungan Sindrom Metabolik Dengan Kejadian Disfungsi Ereksi Pada Pasien Pria Diabetes Melitus Tipe 2 Di Poliklinik Penyakit Dalam Rsup Sanglah Denpasar Association of Metabolic Syndrome With Erectile Dysfunction in Type 2 Diabetes Mellitus Men Patients At. *E-Jurnal Medika Udayana*, 5(3), 1–13.
- McKenzie, S. B., Williams, L. J., Landis-Piwowar, K. R., & McCallister, L. (2020). *Clinical Laboratory Hematology* (4th ed.). Pearson.
- Młynarska, E., Rysz, J., Franczyk, B., Wronka, M., & Krzemi, J. (2022). *The Influence of Lifestyle and Treatment on Oxidative Stress and Inflammation in Diabetes*.
- Mulyani, N. S., Fitriyaningsih, E., Wagustina, S., & Arnisam. (2023). Deteksi Dini Kejadian Sindrom Metabolik Melalui Penyuluhan Gizi, Pengukuran Indeks Massa Tubuh (IMT), dan Pemeriksaan Tekanan Darah serta Kadar Gula Darah. *Jurnal PADE: Pengabmas Dan Edukasi*, 5(1), 34–40. <https://doi.org/10.30867/pade.v5i1.1098>
- Nawal, C. L., Singh, A., Saini, H. L., & Rankawat, G. (2025). *Impact of Blood Glucose Level on Hematological Indices in Patients with Type 2 Diabetes Mellitus*. 73(July 2024), 16–20.
- Ojo, O. A., Ibrahim, H. S., Rotimi, D. E., Ogunlakin, A. D., & Ojo, A. B. (2023). Diabetes mellitus: From molecular mechanism to pathophysiology and pharmacology. *Medicine in Novel Technology and Devices*, 19(February), 100247.
<https://doi.org/10.1016/j.medntd.2023.100247>
- Park, I. R., Chung, Y. G., Won, K. C., Park, I. R., Chung, Y. G., & Won, K. C. (2025). *Overcoming β -Cell Dysfunction in Type 2 Diabetes Mellitus : CD36 Inhibition and Antioxidant System Sulwon Lecture 2024 Overcoming β -Cell Dysfunction in Type 2 Diabetes Mellitus : CD36 Inhibition and Antioxidant System*. 1–12.
- PERKENI. (2021). Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia 2021. *Global Initiative for Asthma*, 46. www.ginasthma.org.
- Ramírez-Guerrero, G., Müller-Ortiz, H., & Pedreros-Rosales, C. (2022).

- Polyuria in adults. A diagnostic approach based on pathophysiology. *Revista Clínica Española (English Edition)*, 222(5), 301–308. <https://doi.org/10.1016/j.rceng.2021.03.003>
- Rodriguez, B. A. T., & Johnson, A. D. (2020). *Platelet Measurements and Type 2 Diabetes : Investigations in Two Population-Based Cohorts*. 7(July), 1–12. <https://doi.org/10.3389/fcvm.2020.00118>
- Rottenkolber, M., Gar, C., Then, C., Wanger, L., Sacco, V., Banning, F., Nevinny-stickel-hinzpeter, C., Grallert, H., Hesse, N., Seissler, J., & Lechner, A. (2021). *A Pathophysiology of Type 2 Diabetes Unrelated to Metabolic Syndrome*. 106(5), 1460–1471. <https://doi.org/10.1210/clinem/dgab057>
- Rustika, R., Driyah, S., Oemiati, R., & Hartati, N. S. (2019). Prediktor Sindrom Metabolik : Studi Kohor Prospektif Selama Enam Tahun di Bogor, Indonesia. *Media Penelitian Dan Pengembangan Kesehatan*, 29(3), 215–224. <https://doi.org/10.22435/mpk.v29i3.654>
- Salvatore, T., Galiero, R., Caturano, A., Rinaldi, L., Criscuolo, L., Martino, A. Di, Albanese, G., Vetrano, E., Catalini, C., Sardu, C., Docimo, G., Marfella, R., & Sasso, F. C. (2023). *Current Knowledge on the Pathophysiology of Lean / Normal-Weight Type 2 Diabetes*.
- Singh, V. (2025). *Lean type 2 diabetes : the overlooked epidemic reshaping global health*.
- Tadasa, E., & Kemal, E. (2025). *Hematological Parameters Among Adult Patients Diagnosed With Type 2 Diabetes Mellitus at Jimma University Medical Center , Jimma , Southwest , Ethiopia*. 2025(Cvd). <https://doi.org/10.1155/ah/2225431>
- Trerattanavong, K., & Tadi, P. (2025). Glimepiride. In *StatPearls*. StarPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK554600/>
- Wikannanda, I. A. A. D., Ni Luh Putu Eka Kartika Sari, & Anak Agung Sri Agung Aryastuti. (2023). Gambaran Penggunaan Terapi Kombinasi Oral Metformin-Sulfonilurea pada Pasien DM Tipe 2 di Denpasar. *Aesculapius Medical Journal*, 3(2), 224–232. <https://doi.org/10.22225/amj.3.2.2023.224-232>
- Williams, A., Bissinger, R., Shamaa, H., Patel, S., Bourne, L., Artunc, F., & Qadri, S. M. (2023). *Pathophysiology of Red Blood Cell Dysfunction in Diabetes and Its Complications*. 327–345.
- World Health Organization. (2000). *The Asia-Pacific perspective: redefining obesity and its treatment*.
- Xu, Y., Yu, Z., Liu, H., & Bian, X. (2025). *Erythrocytes enhance oxygen-*

carrying capacity through self-regulation. May, 1–11.
<https://doi.org/10.3389/fphys.2025.1592176>

Zhang, Y., Zhou, F., Guan, J., Zhou, L., & Chen, B. (2023). Action Mechanism of Metformin and Its Application in Hematological Malignancy Treatments: A Review. *Biomolecules, 13*(2).
<https://doi.org/10.3390/biom13020250>