

## DAFTAR PUSTAKA

- Adeva-andany, M. M., Funcasta-calderón, R., Fernández-fernández, C., Castro-quintela, E., & Carneiro-freire, N. (2019). *Journal of Clinical & Translational Endocrinology Metabolic effects of glucagon in humans*. 15(December 2018), 45–53. <https://doi.org/10.1016/j.jcte.2018.12.005>
- Adriana, G. (2021). *Do Nor Resucitate (DNR) Dalam Sistem Hukum Indonesia*. 1(5), 515–523.
- Ahn, B. (2025). *Advances in Insulin Resistance — Molecular Mechanisms , Therapeutic Targets , and Future Directions*. 1–5.
- Andersen, O. E., Nielsen, O. B., & Overgaard, K. (2019). *Early effects of eccentric contractions on muscle glucose uptake*. 376–385. <https://doi.org/10.1152/jappphysiol.00388.2018>
- Ansari, M., Hardcastle, S., Myers, S., & Williams, A. D. (2023). *The Health and Functional Benefits of Eccentric versus Concentric Exercise Training : A Systematic Review and Meta-Analysis*. March, 288–309.
- Asari, M. N., & Mukhoyyaroh, T. (2024). *The impact of loneliness and anonymity on self-disclosure among social media X users*. 19(01), 32–41.
- Baynest, H. W. (2020). *Classification , Pathophysiology , Diagnosis and Management of Diabetes*. 6(5). <https://doi.org/10.4172/2155-6156.1000541>
- Brilakis, E. S., Edson, R., Bhatt, D. L., Goldman, S., Holmes, D. R., Rao, S. V, Shunk, K., Rangan, B. V, Mavromatis, K., Bavry, A. A., Garcia, S., Latif, F., Armstrong, E., Jneid, H., Conner, T. A., Wagner, T., Karacsonyi, J., Uyeda, L., & Ventura, B. (2020). *HHS Public Access*. 391(10134), 1997–2007. [https://doi.org/10.1016/S0140-6736\(18\)30801-8](https://doi.org/10.1016/S0140-6736(18)30801-8). Drug-eluting
- Busro, A. (2018). *Aspek Hukum Persetujuan Tindakan Medis ( Inform Consent ) Dalam Pelayanan Kesehatan*. 1(1), 1–18.
- Campbell, Cain, M. L., Developmental, S., John, E., Ann, M., Young-dualan, S., & Jensen, S. (2014). *Campbell Biology* (Twelfth ed).
- Campbell, S., Greenwood, M., Prior, S., Walkem, K., Young, S., & Bywaters, D. (2020). *Purposive sampling : complex or simple ? Research case examples*. <https://doi.org/10.1177/1744987120927206>
- Cells, B. M., Sticka, K. D., Schnurr, T. M., Jerome, S. P., Dajles, A., Arleigh, J., Duffy, L. K., Knall, C. M., & Dunlap, K. L. (2019). *HHS Public Access*. 50(5), 938–944. <https://doi.org/10.1249/MSS.0000000000001528>. Exercise
- Chen, T. C., Tseng, W., Huang, G., Chen, H., Tseng, K., Nosaka, K., & Chen, T. C. (2017). *Superior Effects of Eccentric to Concentric Knee Extensor*

*Resistance Training on Physical Fitness , Insulin Sensitivity and Lipid Profiles of Elderly Men.* 8(April), 1–11. <https://doi.org/10.3389/fphys.2017.00209>

Dewi, I., Khotimah, H., Nasution, R., Zulpan, Hariyati, T., & Rusli, A. (2023). *Teori populasi dan pengambilan sampel.* 14, 1–9.

Dhanny, D. R. (2022). *Faktor Yang Mempengaruhi Kadar Glukosa Darah Penderita Diabetes Melitus Tipe II Usia 46-65 Tahun Di Kabupaten Wakatobi.* 11(April), 154–162.

Dwianto, I. H. (2021). *Gambaran Tingkat Pengetahuan Mahasiswa Fisioterapi STIKVINC Tentang Insole Sebagai Alternatif Menurunkan Kadar Gula Darah.* 42–46.

Efriyanti, S. S., & Albina, M. (2025). *Etika Dalam Penelitian Pendidikan : Kajian Prinsip, Tantangan, Dan Solusi Penerapannya.* 3(6).

Fauziansyah, A., Hidayatullah, M. F., Siswandari, & Riyadi, S. (2024). Literature Review: Pengaruh Eccentric Exercise Terhadap Peningkatan Kekuatan Otot Quadriceps Pada Cedera Anterior Cruciate Ligament (Acl). *ASSYIFA : Jurnal Ilmu Kesehatan*, 2(1), 174–188. <https://doi.org/10.62085/ajk.v2i1.61>

Fauziyah, N. (n.d.). *Analisis Data Menggunakan General Linier Model Repeated Measures (GLM-RM) Test di B.*

Ferdian, A., Lesmana, S. I., Banjarnahor, L. A., Fisioterapi, F., Unggul, U. E., & Jeruk, K. (2020). *Efektivitas Antara Nordic Hamstring Exercise Dengan Prone Hang Exercise terhadap Ekstensibilitas Tightness.* 16(1), 19–28.

Fitria, D. I., Faoz, A., & Dolifah, D. (2024). *Correlation between Knowledge of the Nursing Code of Ethics and Non-Maleficence Behavior of Nurses in the Inpatient Room.* 7(1), 216–222. <https://doi.org/10.52774/jkfn.v7i1.174>

Gerich, J. E. (2020). *Review Article Role of the kidney in normal glucose homeostasis and in the hyperglycaemia of diabetes mellitus : therapeutic implications.* i, 136–142. <https://doi.org/10.1111/j.1464-5491.2009.02894.x>

Habibi, A. I., & Artanty, A. (2020). *Perbandingan Kemampuan Daya Tahan Otot Lengan Setelah Aktivitas Eksentrik Dengan Mengonsumsi Glukosa Dan Kopi.* 23–29.

Habibi, A. I., Artanty, A., & Rusdiawan, A. (2020). Comparison Of The Effects Of Glucose And Coffee Toward Blood Glucose Levels And Muscular Endurance After Eccentric Activity. *Jp.Jok (Jurnal Pendidikan Jasmani, Olahraga Dan Kesehatan)*, 3(2), 213–226. <https://doi.org/10.33503/jp.jok.v3i2.622>

Handoko Adelia, Purwanto Bambang, & Mustika Arifa. (2021). Eccentric Exercise Decrease Blood Glucose Level and Improve Protein Level of Glucose Transporters in Diabetic Mice Muscle. *Medico Legal Update*, 21(4), 165–170. <https://doi.org/10.37506/mlu.v21i4.3123>

Hardianto, D. (2021). *Insulin: produksi, jenis, analisis, dan rute pemberian.* Volume

file:///C:/Users/USER/Downloads/Desember2021JBBI.pdf

- Harris-Love, M. O., Gollie, J. M., & Keogh, J. W. L. (2021). Eccentric exercise: Adaptations and applications for health and performance. *Journal of Functional Morphology and Kinesiology*, 6(4). <https://doi.org/10.3390/jfmk6040096>
- Hati, F. S., & Kurnia, A. R. (2023). *Evaluasi Skor Pre-Test Dan Post-Test Peserta Pelatihan Pelayanan Kontrasepsi Bagi Dokter Dan Bidan Di Fasilitas Pelayanan Kesehatan Di BKKBN Provinsi Jawa Tengah*. 7(1).
- Henggu, K. U., & Nurdiansyah, Y. (2021). *Review dari Metabolisme Karbohidrat , Lipid , Protein , dan Asam Nukleat*. 3, 9–17.
- Herwanto, M. E., & Rumampuk, J. F. (2020). *Pengaruh aktivitas fisik terhadap kadar gula darah pada pria dewasa*. 4, 0–5.
- Hody, S., Croisier, J., Bury, T., & Rogister, B. (2020). *Eccentric Muscle Contractions : Risks and Benefits*. 10(May), 1–18. <https://doi.org/10.3389/fphys.2019.00536>
- Irawan, M. A. (2021). *Glukosa & metabolisme energi*. *Sports Science Brief, Volume 01*.
- Juandi, A. S. (2022). *Penyusunan Instrumen Penelitian Tindakan Kelas dalam Upaya Peningkatan Keterampilan Sosial*. 6(1), 91–98.
- Kamal, R. H., Wigati, K. W., & Lefi, A. (2020). *The similar changes of glucose levels before and after moderate intensity exercise acutely in the morning and evening*. 30(2), 39–44. <https://doi.org/10.20473/mbiom.v30i2.2020.39-44>
- Kaunang, H. C. P., & Wangko, S. (2020). *Glut4 jaringan adiposa fungsi dan disfungsi*. 140–147.
- Kim, D. Y., Oh, S. L., & Lim, J. Y. (2022). Applications of Eccentric Exercise to Improve Muscle and Mobility Function in Older Adults. *Annals of Geriatric Medicine and Research*, 26(1), 4–15. <https://doi.org/10.4235/agmr.21.0138>
- Koivula, R. W., Atabaki-pasdar, N., Giordano, G. N., White, T., & Adamski, J. (2020). *The role of physical activity in metabolic homeostasis before and after the onset of type 2 diabetes : an IMI DIRECT study*. 744–756.
- Kubota, N., Kubota, T., & Kadowaki, T. (2025). *Physiological and pathophysiological actions of insulin in the liver*. 72(2), 149–159. <https://doi.org/10.1507/endocrj.EJ24-0192>
- Larasati, E. D., Driananta, R., Dewi, T., Zahirah, A., Rahmatullah, N., Herawati, N., Surabaya, U. N., & Ketintang, J. (2023). *Selulosa dan glukosa*. 6(1), 1–10.
- Lestari, Zulkarnain, & Sijid, S. A. (2021). *Diabetes Melitus : Review Etiologi , Patofisiologi , Gejala , Penyebab , Cara Pemeriksaan , Cara Pengobatan dan*

*Cara Pencegahan. November, 237–241.*

- Li, L., Zhang, S., & Dobson, J. (2020). *The contribution of small and large sensory afferents to postural control in patients with peripheral neuropathy*. 8, 218–227. <https://doi.org/10.1016/j.jshs.2018.09.010>
- Liang, S. G., Chung, J., Chow, M., Leung, N. M., Mo, Y. N., Ming, T., Ng, H., Lok, C., Woo, C., Man, F., & Lam, H. (2025). *The Effects of Ankle and Foot Exercises on Ankle Strength , Balance , and Falls in Older People : A Systematic Review and Meta-Analysis*.
- Machrina, Y., & Yamamoto, Z. (2021). *Effect of Exercise Intensity in Glut4 Expression on Type 2 Diabetes Mellitus Rat*. 1, 2–5.
- Madri. (2021). Kontraksi Otot Skelet. *Jurnal Menssana, Vol. 2, NO(2)*.
- Mochizuki, L., Hamill, J., & Exel, J. (2026). Radial coordination variability : The radial vector coding for quantifying movement stability. *Journal of Biomechanics*, 194(October 2025), 113030. <https://doi.org/10.1016/j.jbiomech.2025.113030>
- Nakrani, M. N., Wineland, R. H., & Anjum, F. (2025). *Fisiologi , Metabolisme Glukosa Perkenalan Masalah yang Perlu Diperhatikan Tingkat Seluler*. 1–7.
- Navale, A. M., & Paranjape, A. N. (2020). *Glucose transporters : physiological and pathological roles*. 5–9. <https://doi.org/10.1007/s12551-015-0186-2>
- Nugraha, G., Andini, A., Nasir, M., Baskara, M. D., & Laila, A. N. (2023). *Peningkatan Wawasan Kader Kesehatan Dalam Menggunakan Alat Glukometer Yang Baik Dan Benar*. 6, 3480–3488.
- Nurkolis, F., Harbuwono, D. S., Astuti, N., & Sidartawan, T. (2025). New insight on dietary strategies to increase insulin sensitivity and reduce diabetes prevalence : an expert perspective and recommendation. In *Discover Food*. Springer International Publishing. <https://doi.org/10.1007/s44187-025-00422-6>
- Oassé, C., Maia, P., Ignácio, D., Pérez, V., Pereira, R., Teixeira, A., Brito, C. J., Aedo-muñoz, E., & Miarka, B. (2026). *Eccentric vs . Concentric Training : A Systematic Review and Meta-Analysis of Randomized Controlled Trials on Performance and Health Benefits Across Diverse Populations*. 1–21.
- Özmen, T., Gafuroğlu, Ü., Aliyeva, A., & Elverici, E. (2020). *Relationship between core stability and dynamic balance in women with postmenopausal osteoporosis*. 64(3), 239–245. <https://doi.org/10.5606/tftrd.2018.1674>
- Patino, C. M., & Ferreira, J. C. (2018). *Inclusion and exclusion criteria in research studies : definitions and why they matter*. 44(2), 6548.
- Philippe, M., Pj, K., Mersa, L., Em, E., Gatterer, H., Melmer, A., Ebenbichler, C., & Burtscher, M. (2016). *Acute effects of concentric and eccentric exercise on glucose metabolism and interleukin-6 concentration in healthy males*. 153–

158. <https://doi.org/10.5604/20831862.1198634>

- Puhwanto, Y. D., Hargiani, F. X., Zakaria, A., & Deo Fau, Y. (2023). Jurnal Keperawatan Muhammadiyah. *Jurnal Keperawatan Muhammadiyah*, 0–3.
- Purwantini, D. (2020). Efektivitas Latihan Eksentrik Sesaat Terhadap Penurunan Kadar Glukosa Darah. *Jurnal Penelitian Kesehatan*, 28–34.
- Putra, A. L. (2020). *Gambaran Kadar Gula Darah sewaktu Pada Mahasiswa Angkatan 2015 Fakultas Kedokteran Universitas Sam Ratulangi Manado*. 3.
- Rahmatunisa, A. N., Ali, Y., & Ms, E. M. (2021). *Perbandingan Hasil Pemeriksaan Glukosa Darah Pada Serum Segera Dan Ditunda Selama 24 Jam*. 5, 1180–1185.
- Rosares, V. E., & Boy, E. (2022). *Pemeriksaan Kadar Gula Darah Untuk Screening Hiperglikemia Dan Hipoglikemia*. 3(2), 65–71.
- Sakellari, V. (2025). *Special Issue “ Posture , Balance , and Gait : Assessment Techniques and Rehabilitation Strategies .”* 0–6.
- Santoro, A., Mcgraw, T. E., Kahn, B. B., Israel, B., & Medical, D. (2022). *HHS Public Access*. 33(4), 748–757. <https://doi.org/10.1016/j.cmet.2021.03.019>. Insulin
- Sellami, M., Almuraikhy, S., Naja, K., & Anwardeen, N. (2025). *Eight weeks of aerobic exercise , but not four , improves insulin sensitivity and cardiovascular performance in young women*. 1–11.
- Soelistijo, S. A., Suastika, K., Lindarto, D., Decroli, E., Permana, H., Krishna W, S., Kusnadi, Y., Budiman, Ikhsan, R., Sasiarini, L., Sanusi, I., Nugroho, K. H., & Susanto, H. (2021). *Pengelolaan Dan Pencegahan Diabetes Melitus Tipe 2 Di Indonesia. Perkumpulan Endokrinologi Indonesia*.
- Subiyono, Martsiningsih, M. A., & Gabrela, D. (2020). *Gambaran Kadar Glukosa Darah Metode GOD-PAP ( Glucose Oksidase – Peroxidase Aminoantypirin ) Sampel Serum dan Plasma EDTA ( Ethylen Diamin Terta Acetat )*. 5(1), 5–8.
- Sugiyono. (2017). *Metode penelitian Kuantitatif, Kualitatif Dan R & D*. Penerbit Alfabeta, Bandung.
- Syahroni, M. I. (2022). *Prosedur Penelitian Kuantitatif. Jurnal Al-Musthafa STIT Al-Aziziyah Lombok Barat*, 2(3), 43–56.
- Szűcs, G., Pipicz, M., Szabó, M. R., Csont, T., Török, L., & Csonka, C. (2023). *Effect of Eccentric Exercise on Metabolic Health in Diabetes and Obesity. Sports Medicine - Open*, 9(1). <https://doi.org/10.1186/s40798-023-00596-2>
- Uehara, K., Santoleri, D., Whitlock, A. E. G., & Titchenell, P. M. (2024). *Insulin Regulation of Hepatic Lipid Homeostasis*. 13(3), 4785–4809. <https://doi.org/10.1002/cphy.c220015>. Insulin

- Wang, Z., & Raunser, S. (2023). *Structural Biochemistry of Muscle Contraction*. 411–433.
- Waruwu, M., Natijatul, S., Utami, P. R., & Yanti, E. (2025). *Metode Penelitian Kuantitatif: Konsep, Jenis, Tahapan dan Kelebihan*. 10, 917–932.
- Willson, J. D., Dougherty, C. P., Ireland, M. L., & Davis, I. M. (2017). *Core Stability and Its Relationship to Lower Injury*. Volume 13,.
- Winarno, A. R., Studi, P., Komputer, T., Vokasi, F. S., Pakuan, U., Darah, G., & Glucometer, S. (2025). *Alat pengukur gula darah 1\*,2*. 5, 86–89.
- Yusuf, H. (2020). *Tesis Pengaruh Latihan eksentrik Terhadap Ekspresi GLUT-1*.
- Zhang, T., Liu, Y., Yang, Y., Luo, J., & Hao, C. (2025). *The Effect and Mechanism of Regular Exercise on Improving Insulin Impedance: Based on the Perspective of Cellular and Molecular Levels*. 1–14.

