

## DAFTAR REFERENSI

- Badan Pusat Statistik Indonesia. (2023). Statistik Penduduk Lanjut Usia 2023 (Vol. 20).
- Bai, X., Soh, K. G., Omar Dev, R. D., Talib, O., Xiao, W., & Cai, H. (2022). Effect of Brisk Walking on Health-Related Physical Fitness Balance and Life Satisfaction Among the Elderly: A Systematic Review. *Frontiers in Public Health*, 9, 829367. <https://doi.org/10.3389/FPUBH.2021.829367/BIBTEX>
- Bar-On, O., Gendler, Y., Stafler, P., Levine, H., Steuer, G., Shmueli, E., Prais, D., & Mei-Zahav, M. (2021). Effects of wearing facemasks during brisk walks: A COVID-19 dilemma. *Journal of the American Board of Family Medicine*, 34(4), 798–801. <https://doi.org/10.3122/JABFM.2021.04.200559>
- Bichay, A. A. F., Ramírez, J. M., Núñez, V. M., Lancho, C., Poblador, M. S., & Lancho, J. L. (2016). Efficacy of treadmill exercises on arterial blood oxygenation, oxygen consumption and walking distance in healthy elderly people: A controlled trial. *BMC Geriatrics*, 16(1). <https://doi.org/10.1186/s12877-016-0283-5>
- Brodeur, Z. R., Paustian, M. J., Monteleone-Haught, D. A., Lamm, R. A., Pagano, A. G., & Ellis, C. E. (2022). The Effects of Static and Dynamic Stretching on Muscle Oxygen Saturation in the Rectus Femoris. *International Journal of Exercise Science*, 15(3), 702. <https://doi.org/10.70252/AQAK3743>
- Burkhardt, H. (2020). Epidemiologic aspects. In *Drug Therapy for the Elderly* (Vol. 9783709109120, pp. 11–19). Springer-Verlag Wien. [https://doi.org/10.1007/978-3-7091-0912-0\\_2](https://doi.org/10.1007/978-3-7091-0912-0_2)
- Chen, Y. H., Chen, L. R., Tsao, C. C., Chen, Y. C., & Huang, C. C. (2022). Effects of a Pedometer-Based Walking Program in Patients with COPD—A Pilot Study. *Medicina*, 58(4), 490. <https://doi.org/10.3390/MEDICINA58040490>
- Criss, M. G., Wingood, M., Staples, W. H., Southard, V., Miller, K. L., Norris, T. L., Avers, D., Ciolek, C. H., Lewis, C. B., & Strunk, E. R. (2022). APTA Geriatrics' Guiding Principles for Best Practices in Geriatric Physical Therapy: An Executive Summary. *Journal of Geriatric Physical Therapy* (2001), 45(2), 70–75. <https://doi.org/10.1519/JPT.0000000000000342>
- Dahlan, sopiyudin. (2010). Besar sampel dan cara pengambilan sampel dalam penelitian kedokteran dan kesehatan. <http://www.penerbitsalemba.com>
- Dara Pratiwi, M., & Sepriani, R. (2023). The effect of physical exercise on oxygen saturation in college students. *Journal of Physical Education and Sport* (JPES), 23, 3178–3182. <https://doi.org/10.7752/jpes.2023.12362>
- David, S., Goldin, J., & Edwards, C. W. (2024). Forced Expiratory Volume. Definitions. <https://doi.org/10.32388/i7tpmz>

- Doody, P., Lord, J. M., Greig, C. A., & Whittaker, A. C. (2023). Frailty: Pathophysiology, Theoretical and Operational Definition(s), Impact, Prevalence, Management and Prevention, in an Increasingly Economically Developed and Ageing World. In *Gerontology* (Vol. 69, Number 8, pp. 927–945). S. Karger AG. <https://doi.org/10.1159/000528561>
- Duraisami, V. (2021). Effect of Pranayama and Brisk Walking Practices on Forced Vital Capacity among Sedentary Women. In *International Journal of Recent Research and Applied Studies* (Vol. 8, Number 9).
- Faelli, E., Panasci, M., Ferrando, V., Bisio, A., Filipas, L., Ruggeri, P., & Bove, M. (2021). The effect of static and dynamic stretching during warm-up on running economy and perception of effort in recreational endurance runners. *International Journal of Environmental Research and Public Health*, 18(16). <https://doi.org/10.3390/ijerph18168386>
- Ferrer, G., Valerio-Pascua, F., Alas-Pineda, C., Alonso, A. C., Yppolito, A., Rodriguez, M., Merrit, D., Manara, V., Gaitán-Zambrano, K., & Pavón-Varela, D. J. (2025). Implementing oxygen saturation-based criteria for discontinuation of long-term oxygen therapy in nursing home residents with chronic respiratory disease. *Multidisciplinary Respiratory Medicine*, 20(1), 1050. <https://doi.org/10.5826/MRM.2025.1050>
- Ismail, F. F. D., Sengkey, L. S., & Lolombulan, J. H. (2017). Pengaruh latihan aerobik two-step stool terhadap fungsi paru pada remaja dengan aktivitas fisik kurang (Vol. 1, Number 3).
- Kadek, N., Lestari, Y., Gede, N. L., & Saraswati, I. (2024). Pengaruh brisk walking exercise terhadap daya tahan kardiorespirasi pada penderita hipertensi (Vol. 17, Number 2).
- Kasthuri, A. (2019). The gathering clouds of grey on the horizon – the healthcare challenges of our aging population. *Journal of the College of Community Physicians of Sri Lanka*, 25(1), 4. <https://doi.org/10.4038/jccpsl.v25i1.8201>
- Kenney, W. L., Wilmore, J., & Costill, D. (2011). *Physiology of Sport and Exercise With Web Study Guide-5th Edition*. 640. [https://books.google.com/books/about/Physiology\\_of\\_Sport\\_and\\_Exercise.html?hl=id&id=FaqCmwECAAJ](https://books.google.com/books/about/Physiology_of_Sport_and_Exercise.html?hl=id&id=FaqCmwECAAJ)
- Ko, J., Deprez, D., Shaw, K., Alcorn, J., Hadjistavropoulos, T., Tomczak, C., Foulds, H., & Chilibeck, P. D. (2021). Stretching is superior to brisk walking for reducing blood pressure in people with high-normal blood pressure or stage I hypertension. *Journal of Physical Activity and Health*, 18(1), 21–28. <https://doi.org/10.1123/JPAH.2020-0365>
- Kooijmans, E. C. M., Hoogendijk, E. O., Pokladníková, J., Smalbil, L., Szczerbińska, K., Barańska, I., Ziuziakowska, A., Fialová, D., Onder, G., Declercq, A., Finne-Soveri, H., Hoogendoorn, M., van Hout, H. P. J., & Joling, K. J. (2023). The prevalence of non-pharmacological interventions in older homecare recipients:

- an overview from six European countries. *European Geriatric Medicine*, 15(1), 243. <https://doi.org/10.1007/S41999-023-00868-W>
- Li, X., Yu, R., Wang, P., Wang, A., & Huang, H. (2021). Effects of Exercise Training on Cardiopulmonary Function and Quality of Life in Elderly Patients with Pulmonary Fibrosis: A Meta-Analysis. *International Journal of Environmental Research and Public Health*, 18(14). <https://doi.org/10.3390/IJERPH18147643>
- Listiarini, D., Kushartanti, BM. W., & Arovah, N. I. (2023). The acute effects of concurrent and breathing exercises on the pulmonary function in post-covid-19 syndrome women. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, 9(1), 92–109. [https://doi.org/10.29407/js\\_unpgri.v9i1.19575](https://doi.org/10.29407/js_unpgri.v9i1.19575)
- Liu, K., Yu, X., Cui, X., Su, Y., Sun, L., Yang, J., & Han, W. (2021). Effects of proprioceptive neuromuscular facilitation stretching combined with aerobic training on pulmonary function in copd patients: A randomized controlled trial. *International Journal of COPD*, 16, 969–977. <https://doi.org/10.2147/COPD.S300569>
- Liu, K., Zhang, W., Yang, Y., Zhang, J., Li, Y., & Chen, Y. (2020). Respiratory rehabilitation in elderly patients with COVID-19: A randomized controlled study. *Complementary Therapies in Clinical Practice*, 39, 101166. <https://doi.org/10.1016/J.CTCP.2020.101166>
- Maghfirah, N. (2025). Pengaruh Pemberian Brisk Walking Exercise Terhadap Blood Pressure dan Kualitas Tidur Pada Pasien Lanjut Usia Hipertensi Di Klub Mattiro Deceng Binaan Puskesmas Biru Kabupaten Bone = The Effect Of Giving Brisk Walking Exercise On Blood Pressure And Sleep Quality In Elderly Hypertension Patients In The Mattiro Deceng Club Under The Guidance Of Biru Public Health Center, Bone Regency.
- Maleke, J. G. M. (2022). Pengaruh deep breathing exercise terhadap nilai forced vital capacity (fvc) pada dewasa muda dengan kelebihan berat badan (overweight).
- Medicine, A. C. of S. (2011). *ACSM's Advanced Exercise Physiology (American College of Sports Med)*. 800. [https://books.google.com/books/about/ACSM\\_s\\_Advanced\\_Exercise\\_Physiology.html?hl=id&id=MHicQAACAAJ](https://books.google.com/books/about/ACSM_s_Advanced_Exercise_Physiology.html?hl=id&id=MHicQAACAAJ)
- Money, A., MacKenzie, A., Parchment, A., Norman, G., Harris, D., Ahmed, S., McGarrigle, L., Hawley-Hague, H., & Todd, C. (2025). Evidence on non-pharmacological interventions for preventing or reversing physical frailty in community-dwelling older adults aged over 50 years: overview of systematic reviews. *BMC Geriatrics*, 25(1), 183. <https://doi.org/10.1186/S12877-025-05768-1>
- Nasrat, S. A., Abd El-Hady, A. A., Hafiz, H. A., Mohamed, M. E., Alaal, A., El-Hinnawy, Y. H., & Aboelmagd, F. (2021). The Efficacy Of Pulmonary Rehabilitation Combined With Threshold Inspiratory Muscle Training And Upper

Extremities Exercises In Patients With Interstitial Lung Diseases. In *Systematic Reviews in Pharmacy* (Vol. 12, Number 3).

- Novitaningrum, P. H., Rahmawati, N. A., & Multazam, A. (2025). Aerobic Exercise Has an Effect on Forced Vital Capacity (FVC) in Collage Students. *JURNAL KEPERAWATAN DAN FISIOTERAPI (JKF)*, 7(2), 216–220. <https://doi.org/10.35451/JKF.V7I2.2601>
- Novotová, K., Pavlů, D., Dvořáčková, D., Arnal-Gómez, A., & Espí-López, G. V. (2022). Influence of Walking as Physiological Training to Improve Respiratory Parameters in the Elderly Population. *International Journal of Environmental Research and Public Health*, 19(13), 7995. <https://doi.org/10.3390/IJERPH19137995>
- Piao, J. J., Wan, B., Zhao, H., Shang, Z., Yan, L., Hao, Z., Wang, Y., Zhang, Y., & Gu, Y. (2022). Effects of different brisk walking intensities on adherence and cardiorespiratory endurance of cardiac rehabilitation among patients with CHD after PCI: protocol for a randomised controlled trial. *BMJ Open*, 12(4), e055437. <https://doi.org/10.1136/BMJOPEN-2021-055437>
- Priego-Jiménez, S., Cavero-Redondo, I., Pascual-Morena, C., Martínez-García, I., Martínez-Vizcaíno, V., & Álvarez-Bueno, C. (2024a). Effect of different exercise programs on lung function in people with chronic obstructive pulmonary disease: A network meta-analysis of RCTs. *Annals of Physical and Rehabilitation Medicine*, 67(2). <https://doi.org/10.1016/J.REHAB.2023.101792>
- Priego-Jiménez, S., Cavero-Redondo, I., Pascual-Morena, C., Martínez-García, I., Martínez-Vizcaíno, V., & Álvarez-Bueno, C. (2024b). Effect of different exercise programs on lung function in people with chronic obstructive pulmonary disease: A network meta-analysis of RCTs. *Annals of Physical and Rehabilitation Medicine*, 67(2), 101792. <https://doi.org/10.1016/J.REHAB.2023.101792>
- Putri Hadi Novitaningrum, Nurul Aini Rahmawati, & Ali Multazam. (2025). Aerobic Exercise Has an Effect on Forced Vital Capacity (FVC) in Collage Students. *JURNAL KEPERAWATAN DAN FISIOTERAPI (JKF)*, 7(2), 216–220. <https://doi.org/10.35451/jkf.v7i2.2601>
- Rasyid, A. P., Hasyar, A. R. A., Yandani, Chaerani, A. K., Rahman, F. A., & Mawarani, J. (2023). Brisk Walking Exercise.
- Rawashdeh, A., & Alnawaiseh, N. (2018). The effect of high-intensity aerobic exercise on the pulmonary function among inactive male individuals. *Biomedical and Pharmacology Journal*, 11(2), 735–741. <https://doi.org/10.13005/BPJ/1427>
- Respiratory Cram. (2026). Activity vs Rest: Oxygen Saturation Trends. <https://blog.respiratorycram.com/activity-vs-rest-oxygen-saturation-trends/>
- Ridwan, A., Graha, A. S., Sundari, S., Cakrawati, T. D., & Saputra, D. E. W. (2024). The Effect Of 60-Minute Walking Exercise And Stretching On Heart And Lung

- Strengthening. *Journal of Vocational Applied Research and Studies*, 1(2).  
<https://doi.org/10.21831/jvars.v1i2.806>
- rizky rian erdianto, rizky. (2024). Pengaruh Brisk Walking Exercise Terhadap perubahan tekanan darah dan saturasi oksigen pada pasien hipertensi di puskesmas sukomoro magetan.
- Ruan, Z., Li, D., Huang, D., Liang, M., Xu, Y., Qiu, Z., & Chen, X. (2023). Relationship between an ageing measure and chronic obstructive pulmonary disease, lung function: a cross-sectional study of NHANES, 2007–2010. *BMJ Open*, 13(11).  
<https://doi.org/10.1136/bmjopen-2023-076746>
- Schepens, T., Fard, S., & Goligher, E. C. (2020). Assessing diaphragmatic function. *Respiratory Care*, 65(6), 807–819. <https://doi.org/10.4187/respcare.07410>
- Shreya, D., Fish, P. N., & Du, D. (2025). Navigating the Future of Elderly Healthcare: A Comprehensive Analysis of Aging Populations and Mortality Trends Using National Inpatient Sample (NIS) Data (2010-2024). *Cureus*, 17(3), e80442.  
<https://doi.org/10.7759/CUREUS.80442>
- Sirbu, C. A., Ivan, R., Vasile, T. M., Eftimie, L. G., & Costache, D. O. (2022). Cutaneous Adverse Reactions Associated with Monoclonal Antibodies Treatment in Multiple Sclerosis: Case Reports and Short Literature Review. *Journal of Clinical Medicine* 2022, Vol. 11, Page 3702, 11(13), 3702.  
<https://doi.org/10.3390/JCM11133702>
- Tauenov, K. E., Seisen, N. B., & Ivashov, A. A. (2020). Social participation of elderly persons: a theoretical approach to the problem. *Bulletin Series of Sociological and Political Sciences*, 71(3), 141–147. <https://doi.org/10.51889/2020-3.1728-8940.19>
- Thomas, E. T., Guppy, M., Straus, S. E., Bell, K. J. L., & Glasziou, P. (2019). Rate of normal lung function decline in ageing adults: a systematic review of prospective cohort studies. *BMJ Open*, 9(6), e028150.  
<https://doi.org/10.1136/BMJOPEN-2018-028150>
- Wang, Q. C., Li, J. Y., Ni, X. S., Zhao, W. W., Wang, X. C., & Wang, L. C. (2025a). Impact of Walking and Respiratory Training on Cardiopulmonary Function and Activity Endurance in Patients With Chronic Heart Failure. *Clinical Cardiology*, 48(4), e70123. <https://doi.org/10.1002/CLC.70123>
- Wang, Q. C., Li, J. Y., Ni, X. S., Zhao, W. W., Wang, X. C., & Wang, L. C. (2025b). Impact of Walking and Respiratory Training on Cardiopulmonary Function and Activity Endurance in Patients With Chronic Heart Failure. *Clinical Cardiology*, 48(4), e70123. <https://doi.org/10.1002/CLC.70123>
- Worldometer. (2026). Indonesia Demographics 2026 (Population, Age, Sex, Trends). <https://www.worldometers.info/demographics/indonesia-demographics/>

Yuri, E., Chung, H. Y., & Chen, F. S. (2025). Reframing SpO<sub>2</sub> tolerance as a physiological switch: implications for hypoxic adaptation and exercise regulation. *Frontiers in Physiology*, 16, 1667238. <https://doi.org/10.3389/FPHYS.2025.1667238>

Zhu, Q., Zhu, J., Wang, X., & Xu, Q. (2022). A Meta Analysis of Physical Exercise on Improving Lung Function and Quality of Life Among Asthma Patients. *Journal of Asthma and Allergy*, 15, 939. <https://doi.org/10.2147/JAA.S369811>