

DAFTAR PUSTAKA

- Abd-Elaleem, N.A. dkk. (2021) "Changes in spirometric parameters with position in asymptomatic Egyptian young males with central obesity," *Multidisciplinary Respiratory Medicine*, 16. Tersedia pada: <https://doi.org/10.4081/MRM.2021.745>.
- Agbaje, A.O. (2024) "Waist-circumference-to-height-ratio had better longitudinal agreement with DEXA-measured fat mass than BMI in 7237 children," *Pediatric research*, 96(5), hal. 1369–1380. Tersedia pada: <https://doi.org/10.1038/S41390-024-03112-8;KWRD=MEDICINE>.
- Agustí, A. dkk. (2023) "Gold 2023: Highlights for primary care," *npj Primary Care Respiratory Medicine*, 33(1). Tersedia pada: <https://doi.org/10.1038/S41533-023-00349-4>.
- Al-Chalabi, S. dkk. (2024) "Mechanistic Links between Central Obesity and Cardiorenal Metabolic Diseases," *CardioRenal Medicine*, 14(1), hal. 12–22. Tersedia pada: <https://doi.org/10.1159/000535772>.
- Aling, P.M.A. (2024) "Hubungan antara Lingkar Perut dan Lingkar Toraks dengan Kejadian Suspect Asma pada Siswa Usia Remaja Awal."
- Aliverti, A., Lacca, D. dan LoMauro, A. (2022) "Quantitative Analysis by 3D Graphics of Thoraco-Abdominal Surface Shape and Breathing Motion," *Frontiers in Bioengineering and Biotechnology*, 10. Tersedia pada: <https://doi.org/10.3389/FBIOE.2022.910499/PDF>.
- Almuraikhy, S. dkk. (2024) "Molecular regulators of exercise-mediated insulin sensitivity in non-obese individuals," *Journal of Cellular and Molecular Medicine*, 28(1), hal. e18015. Tersedia pada: <https://doi.org/10.1111/JCMM.18015>.
- Au-Doung, P.L.W. dkk. (2022) "PUMA screening tool to detect COPD in high-risk patients in Chinese primary care—A validation study," *PLoS ONE*, 17(9 September). Tersedia pada: <https://doi.org/10.1371/JOURNAL.PONE.0274106>.
- Ayine, P. dkk. (2021) "Eating Behaviors in Relation to Child Weight Status and Maternal Education," *Children*, 8(1). Tersedia pada: <https://doi.org/10.3390/CHILDREN8010032>.
- Badr, M. dkk. (2025) "Endocrine consequences of childhood obesity: a narrative review," *Frontiers in Endocrinology*, 16. Tersedia pada: <https://doi.org/10.3389/FENDO.2025.1584861>.
- Bittencourt, J.C. dkk. (2023) "Arterial stiffness indices, pulse wave velocity and central systolic blood pressure, are able to discriminate between obese and non-obese children," *European journal of pediatrics*, 182(3), hal. 1403–1415. Tersedia pada: <https://doi.org/10.1007/S00431-023-04807-6>.
- Bonvicini, L. dkk. (2022) "Effectiveness of mobile health interventions targeting parents to prevent and treat childhood Obesity: Systematic review," *Preventive Medicine Reports*, 29, hal. 101940. Tersedia pada: <https://doi.org/10.1016/J.PMEDR.2022.101940>.
- BPS (2023) *Laporan Survei Kesehatan Indonesia (SKI) 2023 dalam Angka*, Badan Kebijakan Pembangunan Kesehatan Kementerian Kesehatan Republik Indonesia.

- Brandi, M.L. (2021) “Are sex hormones promising candidates to explain sex disparities in the COVID-19 pandemic?,” *Reviews in Endocrine & Metabolic Disorders*, 23(2), hal. 171–183. Tersedia pada: <https://doi.org/10.1007/S11154-021-09692-8>.
- Calcaterra, V., Cena, H., dkk. (2021) “Bariatric Surgery in Adolescents: To Do or Not to Do?,” *Children*, 8(6). Tersedia pada: <https://doi.org/10.3390/CHILDREN8060453>.
- Calcaterra, V., Verduci, E., dkk. (2021) “Pediatric Obesity-Related Asthma: The Role of Nutrition and Nutrients in Prevention and Treatment,” *Nutrients*, 13(11). Tersedia pada: <https://doi.org/10.3390/NU13113708>.
- Calderaro, A. dkk. (2022) “Respiratory Tract Infections and Laboratory Diagnostic Methods: A Review with A Focus on Syndromic Panel-Based Assays,” *Microorganisms*, 10(9). Tersedia pada: <https://doi.org/10.3390/MICROORGANISMS10091856>.
- Cao, S. dkk. (2023) “Environmental and Behavioral Factors in Association with Lung Function Impairment in Children Living in Wuhan, China,” *International Journal of Environmental Research and Public Health*, 20(2). Tersedia pada: <https://doi.org/10.3390/IJERPH20021134>.
- Carayanni, V. dkk. (2021) “Effects of Nutrition, and Physical Activity Habits and Perceptions on Body Mass Index (BMI) in Children Aged 12–15 Years: A Cross-Sectional Study Comparing Boys and Girls,” *Children*, 8(4). Tersedia pada: <https://doi.org/10.3390/CHILDREN8040277>.
- Catalin, R.E. dkk. (2023) “Mediterranean Diet and Lung Function in Adults Current Smokers: A Cross-Sectional Analysis in the MEDISTAR Project,” *Nutrients*, 15(5). Tersedia pada: <https://doi.org/10.3390/NU15051272>.
- Chakravarty, A. dkk. (2024) “Perspectives on physics-based one-dimensional modeling of lung physiology,” *Frontiers in Physiology*, 16. Tersedia pada: <https://doi.org/10.3389/FPHYS.2025.1635983>.
- Charoensittisup, P. dkk. (2025) “Longitudinal effects of obesity on pulmonary function in obese children and adolescents,” *Pediatric Research*, 97(5), hal. 1644–1649. Tersedia pada: <https://doi.org/10.1038/S41390-024-03544-2>.
- Chen, K.Y., Hung, M.H. dan Kao, K.C. (2023) “Impulse oscillometry and its independent role in the diagnosis of chronic obstructive pulmonary disease,” *Heliyon*, 10(1). Tersedia pada: <https://doi.org/10.1016/J.HELİYON.2023.E23627>.
- Cieřki, S. dkk. (2024) “Not Only Metabolic Complications of Childhood Obesity,” *Nutrients*, 16(4). Tersedia pada: <https://doi.org/10.3390/NU16040539>.
- Cole, T.J. dan Lobstein, T. (2022) “Exploring an algorithm to harmonize International Obesity Task Force and World Health Organization child overweight and obesity prevalence rates,” *Pediatric Obesity*, 17(7), hal. e12905. Tersedia pada: <https://doi.org/10.1111/IJPO.12905>.
- Collins, S.P. dkk. (2021) “Feasibility study to implement an interdisciplinary lifestyle and health program for adolescents and the evaluation of the programs benefits for maintaining health,” hal. 167–186.
- Colmenarejo, G. (2020) “Machine Learning Models to Predict Childhood and Adolescent Obesity: A Review,” *Nutrients*, 12(8), hal. 1–31. Tersedia pada: <https://doi.org/10.3390/NU12082466>.
- Costa, T. dkk. (2021) “Influence of Biological Maturity on the Muscular Strength

- of Young Male and Female Swimmers,” *Journal of Human Kinetics*, 78(1), hal. 67–77. Tersedia pada: <https://doi.org/10.2478/HUKIN-2021-0029>.
- Dediu, M. dkk. (2021) “Factors Influencing Lung Function in Patients with Cystic Fibrosis in Western Romania,” *Journal of Multidisciplinary Healthcare*, 14, hal. 1423–1429. Tersedia pada: <https://doi.org/10.2147/JMDH.S313209>.
- Ding, M., Qie, S. dan Wang, H. (2025) “Association between polyunsaturated fatty acids dietary intake and pulmonary function among American children: NHANES 2007–2012,” *Frontiers in Nutrition*, 12. Tersedia pada: <https://doi.org/10.3389/FNUT.2025.1573140>.
- Dira, L.M. dkk. (2025) “New Perspectives in Modulating the Entero-Insular Axis in Pediatric Obesity,” *International Journal of Molecular Sciences*, 26(13). Tersedia pada: <https://doi.org/10.3390/IJMS26136143>.
- Dominelli, P.B. dan Molgat-Seon, Y. (2022) “Sex, gender and the pulmonary physiology of exercise,” *European Respiratory Review*, 31(163). Tersedia pada: <https://doi.org/10.1183/16000617.0074-2021>.
- Durá-Travé, T. dan Gallinas-Victoriano, F. (2023) “Sexual Dimorphism of the Fat Mass Index and the Fat-Free Mass Index in Healthy Adolescents,” *Body Mass Index - Overweight, Normal Weight, Underweight*, hal. 1–12. Tersedia pada: <https://doi.org/10.5772/intechopen.107884>.
- Effiyana, A. dkk. (2024) “Korelasi Indeks Obesitas Sentral Dengan Nilai FVC Pada Mahasiswa PSKPS FK ULM,” *Homeostasis*, 7(1), hal. 35–40. Tersedia pada: <https://doi.org/10.20527/HT.V7I1.12360>.
- Engwa, G.A., Anye, C. dan Nkeh-Chungag, B.N. (2022a) “Association between obesity and lung function in South African adolescents of African Ancestry,” *BMC Pediatrics*, 22(1). Tersedia pada: <https://doi.org/10.1186/S12887-022-03164-X>.
- Engwa, G.A., Anye, C. dan Nkeh-Chungag, B.N. (2022b) “Association between obesity and lung function in South African adolescents of African Ancestry,” *BMC Pediatrics*, 22(1), hal. 1–7. Tersedia pada: <https://doi.org/10.1186/s12887-022-03164-x>.
- Eslami, M. dkk. (2023) “Optimal cut-off value of waist circumference-to-height ratio to predict central obesity in children and adolescents: A systematic review and meta-analysis of diagnostic studies,” *Frontiers in Nutrition*, 9. Tersedia pada: <https://doi.org/10.3389/FNUT.2022.985319>.
- Eyeburu, A., Dessie, Y. dan Assefa, N. (2025) “Burden of overweight and obesity among adolescents in Ethiopia: a systematic review and meta-analysis,” *International Health*, 17(2), hal. 133–152. Tersedia pada: <https://doi.org/10.1093/INTHEALTH/IHAE041>.
- Fan, D., Zhang, L. dan Wang, T. (2024) “The negative association between weight-adjusted-waist index and lung functions: NHANES 2007–2012,” *PLoS ONE*, 19(10 October). Tersedia pada: <https://doi.org/10.1371/JOURNAL.PONE.0311619>.
- Ferreira, M.S. dkk. (2022) “Association between Pulmonary Function and Body Composition in Children and Adolescents with and without Obesity,” *Journal of Clinical Medicine*, 11(24). Tersedia pada: <https://doi.org/10.3390/jcm11247410>.
- Franco, J.V.A. dkk. (2025) “Weight-neutral interventions for people with obesity and the perspective of patients, carers and healthcare professionals: a mixed

- methods review,” *Cochrane Database of Systematic Reviews*, 2025(5). Tersedia pada: <https://doi.org/10.1002/14651858.CD016107>.
- Gandhi, V.D. dkk. (2022) “Androgen receptor signaling promotes Treg suppressive function during allergic airway inflammation,” *Journal of Clinical Investigation*, 132(4). Tersedia pada: <https://doi.org/10.1172/JCI153397>.
- Georgakopoulou, V. dkk. (2024) “Lung function at three months after hospitalization due to COVID-19 pneumonia: Comparison of alpha, delta and omicron variant predominance periods,” *Experimental and Therapeutic Medicine*, 27(2). Tersedia pada: <https://doi.org/10.3892/ETM.2024.12372>.
- Geraets, A.F.J. dkk. (2023) “Cross-national time trends in adolescent body weight perception and the explanatory role of overweight/obesity prevalence,” *Child and Adolescent Obesity*, 6(1). Tersedia pada: <https://doi.org/10.1080/2574254X.2023.2218148>.
- Giacobbe, G. dkk. (2023) “Gender Medicine in Clinical Radiology Practice,” *Journal of Personalized Medicine*, 13(2). Tersedia pada: <https://doi.org/10.3390/JPM13020223>.
- Gilardini, L. dkk. (2024) “Sex differences in cardiometabolic risk factors and in response to lifestyle intervention in prepubertal and pubertal subjects with obesity,” *Frontiers in Pediatrics*, 12. Tersedia pada: <https://doi.org/10.3389/FPED.2024.1304451>.
- Gloria C. Gimenez dan Lelis Noelia Morales Clemotte (2020) “Guía de Ejercicios Respiratorios para personas con COVID-19,” *ResearchGate*, (April), hal. 1–16. Tersedia pada: https://www.researchgate.net/publication/340790185_Guia_de_Ejercicios_Respiratorios_para_personas_con_COVID-19%0Ahttps://www.researchgate.net/publication/340790185_Guia_de_Ejercicios_Respiratorios_para_personas_con_COVID-19/citations.
- Gordana Sendić, M. (2023) *Respiratory system: Anatomy and functions* | *Kenhub*. Tersedia pada: <https://www.kenhub.com/en/library/anatomy/the-respiratory-system> (Diakses: 9 Oktober 2025).
- Guerrini Usubini, A. dkk. (2024) “Emotional and Behavioral Impairment and Comorbid Eating Disorder Symptoms in Adolescents with Obesity: A Cross-Sectional Study,” *Journal of Clinical Medicine*, 13(7). Tersedia pada: <https://doi.org/10.3390/JCM13072068>.
- Gülü, M. dkk. (2023) “Exploring obesity, physical activity, and digital game addiction levels among adolescents: A study on machine learning-based prediction of digital game addiction,” *Frontiers in Psychology*, 14. Tersedia pada: <https://doi.org/10.3389/FPSYG.2023.1097145/PDF>.
- Hall, G.L. dkk. (2021) “Official ERS technical standard: Global Lung Function Initiative reference values for static lung volumes in individuals of European ancestry,” *European Respiratory Journal*, 57(3). Tersedia pada: <https://doi.org/10.1183/13993003.00289-2020>.
- Hamzah, N.A. dkk. (2023) “Occupational Pesticide Exposure and Respiratory Effects among Mosquito Control Workers in Kota Bharu and Bachok, Kelantan,” *Journal of Energy and Safety Technology (JEST)*, 5(2), hal. 39–51. Tersedia pada: <https://doi.org/10.11113/JEST.V5N2.117>.
- Al Hariri, M. dkk. (2024) “Comparing the metabolic signatures of obesity defined by waist circumference, waist-hip ratio, or BMI,” *Obesity*, 32(8), hal. 1494–

1507. Tersedia pada: <https://doi.org/10.1002/OBY.24070>.
- Hastuti, J. dkk. (2020) "Patterns of Body Mass Index, Percentage Body Fat, and Skinfold Thicknesses in 7- to 18-Year-Old Children and Adolescents from Indonesia," *International journal of preventive medicine*, 11(1), hal. 129. Tersedia pada: https://doi.org/10.4103/IJPVM.IJPVM_388_19.
- Haznawati, N.D., Probosari, E. dan Fitranti, D.Y. (2019) "Hubungan Indikator Obesitas Dengan Kapasitas Vital Paru Pada Remaja Akhir," *Journal of Nutrition College*, 8(2), hal. 108. Tersedia pada: <http://ejournal3.undip.ac.id/index.php/jnc/>.
- He, H. dkk. (2022) "Body mass index was linked with multi-cardiometabolic abnormalities in Chinese children and adolescents: a community-based survey," *BMC pediatrics*, 22(1). Tersedia pada: <https://doi.org/10.1186/S12887-021-03092-2>.
- Hetemli, N. dkk. (2025) "Effect of Obesity and Metabolic Syndrome on Pulmonary Functions and Exhaled Nitric Oxide in Adolescents.," *Klinische Pädiatrie*, 237(4), hal. 235–242. Tersedia pada: <https://doi.org/10.1055/A-2602-5567>.
- Holmes, C.J. dan Racette, S.B. (2021) "The Utility of Body Composition Assessment in Nutrition and Clinical Practice: An Overview of Current Methodology," *Nutrients* 2021, Vol. 13, Page 2493, 13(8), hal. 2493. Tersedia pada: <https://doi.org/10.3390/NU13082493>.
- Hsu, H.F. dkk. (2023) "Sex differences in the change of exercise behavior leading to incident metabolic syndrome reduction: A community-based prospective study," *Preventive Medicine Reports*, 31. Tersedia pada: <https://doi.org/10.1016/j.pmedr.2022.102076>.
- Hussain, S.S. dkk. (2024) "A critical review of health and financial implications of obesity during the COVID-19 pandemic," *Annals of Medicine and Surgery*, 86(10), hal. 5851–5858. Tersedia pada: <https://doi.org/10.1097/MS9.0000000000002310>.
- Indrayan, A. dkk. (2023) "Quest for Biomarkers of Positive Health: A Review," *Indian Journal of Community Medicine*, 48(3), hal. 382–389. Tersedia pada: https://doi.org/10.4103/IJCM.IJCM_480_22.
- Irandoost, K. dkk. (2021) "Exergaming and Aquatic Exercises Affect Lung Function and Weight Loss in Obese Children," *International journal of sports medicine*, 42(6), hal. 566–572. Tersedia pada: <https://doi.org/10.1055/A-1289-9307>.
- Ishikawa, C. dkk. (2021) "Comparison of body composition parameters in the study of the association between body composition and pulmonary function," *BMC Pulmonary Medicine*, 21(1). Tersedia pada: <https://doi.org/10.1186/S12890-021-01543-1>.
- Jain, A.K. dkk. (2024) "SpiroActive: Active Learning for Efficient Data Acquisition for Spirometry," *arXiv.org* [Preprint]. Tersedia pada: <https://doi.org/10.48550/ARXIV.2410.22950>.
- Jandrić-Kočić, M. dan Selmanović, S. (2022) "Childhood obesity," *Medicinski glasnik Specijalne bolnice za bolesti štitaste žlezde i bolesti metabolizma*, 27(84), hal. 26–68. Tersedia pada: <https://doi.org/10.5937/MGISZM2284026J>.
- Jeon, J., Lee, S. dan Oh, C. (2023) "Age-specific risk factors for the prediction of obesity using a machine learning approach," *Frontiers in public health*, 10.

- Tersedia pada: <https://doi.org/10.3389/FPUBH.2022.998782>.
- Jessie Newell (2014) *Anthropometric Measurements: When to Use this Assessment*. Tersedia pada: <https://www.acefitness.org/fitness-certifications/ace-answers/exam-preparation-blog/3815/anthropometric-measurements-when-to-use-this-assessment/?srsltid=AfmBOoqQXLDQIj1XRdG7gtsvbtwYNRLuYwR89q--Qn8f44GCxipiLGuM> (Diakses: 13 Oktober 2025).
- Jiang, K. dkk. (2023) "Association between body weight misperception and snacking patterns among adolescents: a population-based cross-sectional study," *BMC Public Health*, 23(1). Tersedia pada: <https://doi.org/10.1186/S12889-023-17316-W>.
- João, R. dkk. (2021) "Diffusion of scientific concepts on obesity in the global context: a historical review," *Revista de Nutrição*, 34, hal. e200166. Tersedia pada: <https://doi.org/10.1590/1678-9865202134E200166>.
- Johnson, V.R., Bowen-Jallow, K.A. dan Cody Stanford, F. (2021) "A call to action: Multi-disciplinary care and treatment of obesity in pediatrics," *Pediatric Investigation*, 5(1), hal. 1–2. Tersedia pada: <https://doi.org/10.1002/PED4.12245>.
- Kadir, S., Septian, T. dan Maksum (2023) "Central Obesity Incidence in Students of Public Health Department, Universitas Negeri Gorontalo Based on Fiber Intake," *International Journal of Public Health Excellence (IJPHE)*, 3(1), hal. 139–146. Tersedia pada: <https://doi.org/10.55299/IJPHE.V3I1.472>.
- Kataoka, H., Nitta, K. dan Hoshino, J. (2023) "Visceral fat and attribute-based medicine in chronic kidney disease," *Frontiers in Endocrinology*, 14. Tersedia pada: <https://doi.org/10.3389/FENDO.2023.1097596/PDF>.
- Kaw, R., Dupuy-McCauley, K. dan Wong, J. (2024) "Screening and Perioperative Management of Obesity Hypoventilation Syndrome," *Journal of Clinical Medicine*, 13(17). Tersedia pada: <https://doi.org/10.3390/JCM13175000>.
- Al Khatib, A.O., El-Tanani, M. dan Al-Obaidi, H. (2023) "Inhaled Medicines for Targeting Non-Small Cell Lung Cancer," *Pharmaceutics*, 15(12). Tersedia pada: <https://doi.org/10.3390/PHARMACEUTICS15122777>.
- Khidir, M. dkk. (2024) "Comparison of Forced Expiratory Flow (FEF) 25-75% between Post-COVID-19 Patients with Different Severity at Universitas Gadjah Mada Academic Hospital," *Jurnal Respirasi*, 10(1), hal. 23–29. Tersedia pada: <https://doi.org/10.20473/JR.V10-I.1.2024.23-29>.
- Kiani, F.Z. dkk. (2021) "Profile and preliminary results of Iranian sub cohort chronic obstructive pulmonary disease (COPD) in Shahrekord PERSIAN cohort in southwest Iran," *BMC Pulmonary Medicine*, 21(1). Tersedia pada: <https://doi.org/10.1186/S12890-021-01469-8>.
- Kim, G.D., Lim, E.Y. dan Shin, H.S. (2024) "Macrophage Polarization and Functions in Pathogenesis of Chronic Obstructive Pulmonary Disease," *International Journal of Molecular Sciences*, 25(11). Tersedia pada: <https://doi.org/10.3390/IJMS25115631>.
- Kim, T.N. (2022) "Use of Dual-Energy X-ray Absorptiometry for Body Composition in Chronic Disease Management," *Journal of Korean Diabetes*, 23(2), hal. 97–105. Tersedia pada: <https://doi.org/10.4093/JKD.2022.23.2.97>.
- Kirkeleit, J. dkk. (2023) "Early life exposures contributing to accelerated lung function decline in adulthood – a follow-up study of 11,000 adults from the

- general population,” *EClinicalMedicine*, 66. Tersedia pada: <https://doi.org/10.1016/J.ECLINM.2023.102339>.
- Kokka, I., Mourikis, I. dan Bacopoulou, F. (2023) “Psychiatric Disorders and Obesity in Childhood and Adolescence—A Systematic Review of Cross-Sectional Studies,” *Children*, 10(2). Tersedia pada: <https://doi.org/10.3390/CHILDREN10020285>.
- Komaroff, M. (2016) “For Researchers on Obesity: Historical Review of Extra Body Weight Definitions,” *Journal of Obesity*, 2016. Tersedia pada: <https://doi.org/10.1155/2016/2460285>.
- Lavie, C.J., Sanchis-Gomar, F. dan Neeland, I.J. (2022) “Body Composition and Pulmonary Diseases,” *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 19(1), hal. 262–264. Tersedia pada: <https://doi.org/10.1080/15412555.2022.2070465>.
- Lewandowski, Z. dkk. (2022) “Comparison of Skinfold Thickness Measured by Caliper and Ultrasound Scanner in Normative Weight Women,” *International Journal of Environmental Research and Public Health*, 19(23). Tersedia pada: <https://doi.org/10.3390/IJERPH192316230>.
- Li, C. dkk. (2024) “New sagittal abdominal diameter and transverse abdominal diameter based equations to estimate visceral fat area in type 2 diabetes patients,” *BMC Public Health*, 24(1). Tersedia pada: <https://doi.org/10.1186/S12889-024-18659-8>.
- Li, J. dkk. (2023) “The perspectives of NETosis on the progression of obesity and obesity-related diseases: mechanisms and applications,” *Frontiers in Cell and Developmental Biology*, 11. Tersedia pada: <https://doi.org/10.3389/FCELL.2023.1221361>.
- Li, L. dkk. (2025) “Age Trajectories of O₂ Saturation and Levels of Serum Bicarbonate or End-Tidal CO₂ Across the Life Course of Women and Men: Insights from EHR and PSG Data,” *Biomolecules*, 15(6). Tersedia pada: <https://doi.org/10.3390/BIOM15060884>.
- Liao, Y.S. dkk. (2020) “Comparison of Bioelectrical Impedance Analysis and Dual Energy X-ray Absorptiometry for Total and Segmental Bone Mineral Content with a Three-Compartment Model,” *International Journal of Environmental Research and Public Health*, 17(7). Tersedia pada: <https://doi.org/10.3390/IJERPH17072595>.
- Limkul, L. dkk. (2025) “Effects of metabolic syndrome and its components on pulmonary function and functional capacity in children and adolescents with obesity,” *European Journal of Pediatrics*, 184(9). Tersedia pada: <https://doi.org/10.1007/S00431-025-06446-5>.
- Lingappan, K. dkk. (2025) “Addressing Sex as a Biological Variable in Preclinical Models of Lung Disease: An Official American Thoracic Society Research Statement,” *American Journal of Respiratory and Critical Care Medicine*, 211(8), hal. 1346–1368. Tersedia pada: <https://doi.org/10.1164/RCCM.202506-1361ST>.
- Lisetyaningrum, I., Pujasari, H. dan Kuntarti (2021) “A cross-sectional analysis of snacking habits, eating habits, physical activity, and indicators of obesity among high school students in Jakarta, Indonesia,” *Journal of Public Health Research*, 10(s1). Tersedia pada: <https://doi.org/10.4081/JPHR.2021.2402>.
- Liu, B. dkk. (2021) “Body Mass Index and Its Change from Adolescence to

- Adulthood Are Closely Related to the Risk of Adult Metabolic Syndrome in China,” *International Journal of Endocrinology*, 2021, hal. 7. Tersedia pada: <https://doi.org/10.1155/2021/8888862>.
- Luca, A.C. dkk. (2022) “Increasing Trends in Obesity-Related Cardiovascular Risk Factors in Romanian Children and Adolescents—Retrospective Study,” *Healthcare*, 10(12). Tersedia pada: <https://doi.org/10.3390/HEALTHCARE10122452>.
- Ma, H. dkk. (2022) “Using inflammatory index to distinguish asthma, asthma-COPD overlap and COPD: A retrospective observational study,” *Frontiers in Medicine*, 9. Tersedia pada: <https://doi.org/10.3389/FMED.2022.1045503/PDF>.
- Magiera, B. dkk. (2024) “Childhood obesity - risk factors and prevention strategies,” *Journal of Education, Health and Sport*, 60, hal. 175–187. Tersedia pada: <https://doi.org/10.12775/JEHS.2024.60.012>.
- Mahmoud, O. dkk. (2022) “Early-life and health behaviour influences on lung function in early adulthood,” *European Respiratory Journal*, 61(3). Tersedia pada: <https://doi.org/10.1183/13993003.01316-2020>.
- Makri, R. dkk. (2022) “Prevalence of Overweight and Obesity and Associated Diet-Related Behaviours and Habits in a Representative Sample of Adolescents in Greece,” *Children*, 9(1). Tersedia pada: <https://doi.org/10.3390/CHILDREN9010119>.
- Maligianni, I. dkk. (2021) “The Potential Role of Exosomes in Child and Adolescent Obesity,” *Children*, 8(3). Tersedia pada: <https://doi.org/10.3390/CHILDREN8030196>.
- Martínez-Luna, N. dkk. (2022) “Association between body composition, sarcopenia and pulmonary function in chronic obstructive pulmonary disease,” *BMC Pulmonary Medicine*, 22(1). Tersedia pada: <https://doi.org/10.1186/S12890-022-01907-1>.
- Mastorci, F. dkk. (2021) “Relationship between Weight Status and Health-Related Quality of Life in a Sample of Early Adolescents from Central and Northern Italy: A Cross-Sectional Study of the AVATAR Project Participants,” *International Journal of Environmental Research and Public Health*, 18(16). Tersedia pada: <https://doi.org/10.3390/IJERPH18168782>.
- Mathur, T. dkk. (2024) “Evaluating the Role of Glycemic Control in Modulating Pulmonary Function Among Smokers With Diabetes Mellitus: A Systematic Review,” *Cureus* [Preprint]. Tersedia pada: <https://doi.org/10.7759/CUREUS.56895>.
- Mazur, A. dkk. (2022) “Childhood Obesity: Position Statement of Polish Society of Pediatrics, Polish Society for Pediatric Obesity, Polish Society of Pediatric Endocrinology and Diabetes, the College of Family Physicians in Poland and Polish Association for Study on Obesity,” *Nutrients*, 14(18). Tersedia pada: <https://doi.org/10.3390/NU14183806>.
- Mendoza-Muñoz, M. dkk. (2021) “Descriptive study about bodyweight status of extremadura adolescents. Are we applying the best indicator as the reference parameter?,” *Biology*, 10(7). Tersedia pada: <https://doi.org/10.3390/biology10070662>.
- Miladi, S. dkk. (2024) “Time-Restricted Eating Benefits on Pulmonary Function and Postural Balance in Overweight or Obese Women,” *Nutrients*, 16(17).

- Tersedia pada: <https://doi.org/10.3390/NU16172919>.
- Mocelin, H.T., Fischer, G.B. dan Bush, A. (2021) “Adverse early-life environmental exposures and their repercussions on adult respiratory health,” *Jornal de Pediatria*, 98, hal. S86–S95. Tersedia pada: <https://doi.org/10.1016/J.JPED.2021.11.005>.
- Mohamed Ali, M. dan Elhamed Zaki, N.A. (2017) “Assessment of prevalence, knowledge, attitude and practices of obesity among college students in Sohag Governorate,” *International Journal of Current Research in Medical Sciences*, 3(4), hal. 87–96. Tersedia pada: <https://doi.org/10.22192/IJCRMS.2017.03.04.014>.
- Mu, L. dkk. (2021) “Association between high BMI and high homocysteine levels in Chinese patients with bipolar disorder,” *Journal of affective disorders*, 295, hal. 284–290. Tersedia pada: <https://doi.org/10.1016/J.JAD.2021.08.032>.
- Mundi, M.S. dkk. (2021) “When Pandemics Collide: the Interplay of Obesity and COVID-19,” *Current Gastroenterology Reports*, 23(12). Tersedia pada: <https://doi.org/10.1007/S11894-021-00822-5>.
- Muñoz-Cofré, R. dkk. (2025) “Relationship Between Plasma Leptin Levels and Airflow Limitation in the Small and Medium Airways in Young Adults,” *Journal of Clinical Medicine*, 14(5). Tersedia pada: <https://doi.org/10.3390/JCM14051624>.
- Muscogiuri, G. dkk. (2023) “Obesity: a gender-view,” *Journal of Endocrinological Investigation*, 47(2), hal. 299–306. Tersedia pada: <https://doi.org/10.1007/S40618-023-02196-Z>.
- Neves, S.C. dkk. (2021) “Risk factors involved in adolescent obesity: an integrative review.,” *Ciência & Saúde Coletiva*, 26, hal. 4871–4884. Tersedia pada: <https://doi.org/10.1590/1413-812320212611.3.30852019>.
- Nevill, A.M. dkk. (2025) “NICE waist-to-height ratio guidelines ‘to have a waist<0.5 of your height’, are suitable for children but misleading for adolescents,” *Nutrition, Metabolism and Cardiovascular Diseases* [Preprint]. Tersedia pada: <https://doi.org/10.1016/J.NUMECD.2025.104117>.
- Noveyani, A.E., Nurbaeti, D. dan Adi, D.I. (2024) “The Relationship between Consumption Patterns of Macronutrients, Fiber, and Physical Activity with the Incidence of Obesity at Nuris Jember High School,” *Majalah Kesehatan Indonesia*, 5(2), hal. 45–54. Tersedia pada: <https://doi.org/10.47679/MAKEIN.2024209>.
- Nurlim, I. (2012) “Hubungan Obesitas Sentral dengan VO2 Maks pada Mahasiswa Fisioterapi Fakultas Kedokteran Universitas Hasanuddin Tahun 2012,” *Fakultas Kedokteran Universitas Hasanuddin* [Preprint].
- Octavia, F.N. dkk. (2025) “Hubungan Obesitas Dengan Fungsi Paru Pada Pemeriksaan Spirometri Mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Andalas,” *SINERGI: Jurnal Riset Ilmiah*, 2(3), hal. 1703–1711. Tersedia pada: <https://doi.org/10.62335/sinergi.v2i3.1068>.
- Oktaviani, S. dkk. (2021) “Prevalence of Obesity and Overweight Stratified by Age Group of the 34 Provinces in Indonesia: Local Empirical Bayesian Estimation,” *Asian Community Health Nursing Research*, hal. 15. Tersedia pada: <https://doi.org/10.29253/ACHNR.2021.31572>.
- Özkaya, V. dkk. (2021) “Prevalence of obesity in prepubertal and pubertal with

- Turkish population type 1 diabetes,” *Diabetology International*, 12(4), hal. 412–419. Tersedia pada: <https://doi.org/10.1007/S13340-021-00498-2/METRICS>.
- Palma, G. dkk. (2022) “Adipose Tissue Inflammation and Pulmonary Dysfunction in Obesity,” *International Journal of Molecular Sciences*, 23(13). Tersedia pada: <https://doi.org/10.3390/IJMS23137349>.
- Park, S.C. dkk. (2024) “Induction of protective immune responses at respiratory mucosal sites,” *Human Vaccines & Immunotherapeutics*, 20(1), hal. 2368288. Tersedia pada: <https://doi.org/10.1080/21645515.2024.2368288>.
- Park, Y. dkk. (2023) “Longitudinal association between adiposity changes and lung function deterioration,” *Respiratory Research*, 24(1). Tersedia pada: <https://doi.org/10.1186/S12931-023-02322-8>.
- Pati, S. dkk. (2023) “Obesity and Cancer: A Current Overview of Epidemiology, Pathogenesis, Outcomes, and Management,” *Cancers*, 15(2). Tersedia pada: <https://doi.org/10.3390/CANCERS15020485>.
- Pelizzo, G. dkk. (2024) “The impact of hormones on lung development and function: an overlooked aspect to consider from early childhood,” *Frontiers in Endocrinology*, 15. Tersedia pada: <https://doi.org/10.3389/FENDO.2024.1425149>.
- Pennings, N. dkk. (2025) “Obesity management in primary care: A joint clinical perspective and expert review from the Obesity Medicine Association (OMA) and the American College of Osteopathic Family Physicians (ACOF) - 2025,” *Obesity Pillars*, 14. Tersedia pada: <https://doi.org/10.1016/J.OBPILL.2025.100172>.
- Piqueras, P. dkk. (2021) “Anthropometric Indicators as a Tool for Diagnosis of Obesity and Other Health Risk Factors: A Literature Review,” *Frontiers in Psychology*, 12. Tersedia pada: <https://doi.org/10.3389/FPSYG.2021.631179/PDF>.
- Ramesh, N. dkk. (2024) “Correlation of anthropometric measurements with body mass index and estimation of the proportion of metabolic syndrome among overweight and obese children: a hospital-based cross-sectional study,” *BMJ Paediatrics Open*, 8(1). Tersedia pada: <https://doi.org/10.1136/BMJPO-2023-002354>.
- Rebuli, M.E. (2021) “Respiratory Sex Differences in Response to Smoke Exposure,” *Sex-Based Differences in Lung Physiology*, hal. 291–321. Tersedia pada: https://doi.org/10.1007/978-3-030-63549-7_10.
- Ren, H. dkk. (2025) “Antidepressant intervention to possibly delay disease progression and frailty in elderly idiopathic pulmonary fibrosis patients: a clinical trial,” *Aging Clinical and Experimental Research*, 37(1). Tersedia pada: <https://doi.org/10.1007/S40520-025-03009-4>.
- Ren, X. dkk. (2025) “Gender-, Age-, and Region-Specific Associations Between Obesity and Nutrition/Health Knowledge, Dietary Diversity, and Physical Activity in Chinese School-Age Students: A Cross-Sectional Study,” *Nutrients*, 17(13). Tersedia pada: <https://doi.org/10.3390/NU17132214>.
- Ritter, J. do A. dkk. (2021) “Association between diet quality index and cardiometabolic risk factors in adolescents: Study of Cardiovascular Risks in Adolescents (ERICA),” *Nutrition*, 90, hal. 111216. Tersedia pada: <https://doi.org/10.1016/J.NUT.2021.111216>.

- Rizki, G. dkk. (2024) "Eating Habits, Lifestyle and Friends Associated with the Incidence of Adolescent Overnutrition at Bengkulu," *Open Global Scientific Journal*, 3(1), hal. 38–47. Tersedia pada: <https://doi.org/10.70110/OGSJ.V3I1.28>.
- Roberts, C.A. (2021) "Physical and Psychological Effects of Bariatric Surgery on Obese Adolescents: A Review," *Frontiers in Pediatrics*, 8. Tersedia pada: <https://doi.org/10.3389/FPED.2020.591598/PDF>.
- Rodriguez, A. dkk. (2022) "Fitness, Food, and Biomarkers: Characterizing Body Composition in 19,634 Early Adolescents," *Nutrients*, 14(7). Tersedia pada: <https://doi.org/10.3390/NU14071369>.
- Rosales-Ricardo, Y. dkk. (2023) "Obesity and overweight as an international public health problem," *Bionatura*, 8(3). Tersedia pada: <https://doi.org/10.21931/RB/2023.08.03.15>.
- Rückert-Eheberg, I.M. dkk. (2025) "Respiratory rate and its associations with disease and lifestyle factors in the general population – results from the KORA-FF4 study," *PLoS ONE*, 20(3 March). Tersedia pada: <https://doi.org/10.1371/JOURNAL.PONE.0318502>.
- Russjan, E. (2024) "The Role of Peptides in Asthma–Obesity Phenotype," *International Journal of Molecular Sciences*, 25(6). Tersedia pada: <https://doi.org/10.3390/IJMS25063213>.
- Said, M.A. dan Alibrahim, M.S. (2025) "From activity to obesity: understanding gender and type of school divide among Saudi adolescents," *Frontiers in Public Health*, 13. Tersedia pada: <https://doi.org/10.3389/FPUBH.2025.1552243>.
- Samouda, H. dan Langlet, J. (2022) "Body fat assessment in youth with overweight or obesity by an automated bioelectrical impedance analysis device, in comparison with the dual-energy x-ray absorptiometry: a cross sectional study," *BMC Endocrine Disorders*, 22(1). Tersedia pada: <https://doi.org/10.1186/S12902-022-01111-6>.
- Sari, P. dkk. (2022) "The Study of Nutrient Intake and Adolescent Girls' Quality of Life in a Rural Area of Indonesia," *Children (Basel, Switzerland)*, 9(8). Tersedia pada: <https://doi.org/10.3390/CHILDREN9081248>.
- Sarintohe, E. dkk. (2022) "The Prevalence of Overweight Status among Early Adolescents from Private Schools in Indonesia: Sex-Specific Patterns Determined by School Urbanization Level," *Nutrients*, 14(5). Tersedia pada: <https://doi.org/10.3390/NU14051001>.
- Schröder, H. dkk. (2024) "Twenty-year trend in the prevalence of increased cardiometabolic risk, measured by abdominal obesity, among Spanish children and adolescents across body mass index categories," *BMC Medicine*, 22(1). Tersedia pada: <https://doi.org/10.1186/S12916-024-03719-Y>.
- Shaban Mohamed, M.A. dkk. (2022) "Risk Factors, Clinical Consequences, Prevention, and Treatment of Childhood Obesity," *Children*, 9(12). Tersedia pada: <https://doi.org/10.3390/CHILDREN9121975>.
- Shadmehri, S.-, Kazemi, N. dan Heydari, F.Z. (2021) "Comparison of Effect of High-Intensity Interval Training and Aerobic Training on Respiratory Volumes in Female Students," *Tanaffos* [Preprint].
- Sharara, S.H. dkk. (2022) "Salivary bacterial community profile in normal-weight and obese adolescent patients prior to orthodontic treatment with fixed

- appliances,” *Orthodontics & craniofacial research*, 25(4), hal. 569–575. Tersedia pada: <https://doi.org/10.1111/OCR.12571>.
- Shi, W. dkk. (2022) “The effects of high-intensity interval training and moderate-intensity continuous training on visceral fat and carotid hemodynamics parameters in obese adults,” *Journal of Exercise Science & Fitness*, 20(4), hal. 355–365. Tersedia pada: <https://doi.org/10.1016/J.JESF.2022.09.001>.
- Shinta Kurnia Febriliani, Nurul Aini Rahmawati dan Siti Ainun Ma'rufa (2024) “The Correlation Of Waist Circumference And Waist Hip Circumference Ratio With Vital Lung Capacity in Collage Students,” *Jurnal Keperawatan Dan Fisioterapi (Jkf)*, 7(1), hal. 61–68. Tersedia pada: <https://doi.org/10.35451/jkf.v7i1.2188>.
- Silva-Reis, A. dkk. (2024) “Association Between Visceral Fat and Lung Function Impairment in Overweight and Grade I Obese Women: A Cross-Sectional Study,” *Advances in Respiratory Medicine*, 92(6), hal. 548–558. Tersedia pada: <https://doi.org/10.3390/ARM92060048>.
- Sokal-Dembowska, A. dkk. (2025) “Physical Activity and Metabolic Disorders—What Does Gut Microbiota Have to Do with It?,” *Current Issues in Molecular Biology*, 47(8). Tersedia pada: <https://doi.org/10.3390/CIMB47080630>.
- Song, I., Ryu, S. dan Kim, D.S. (2024) “Relationship between obesity, body composition, and pulmonary function among Korean adults aged 40 years and older,” *Scientific Reports*, 14(1). Tersedia pada: <https://doi.org/10.1038/S41598-024-70809-5>.
- Southcombe, F. dkk. (2022) “More than just body mass index: Using the Edmonton obesity staging system for pediatrics to define obesity severity in a multi-ethnic Australian pediatric clinical cohort,” *Obesity science & practice*, 9(3), hal. 285–295. Tersedia pada: <https://doi.org/10.1002/OSP4.648>.
- Sulistiadi, W. dkk. (2023) “Growing Up Unequal: Disparities of Childhood Overweight and Obesity in Indonesia’s 514 Districts,” *Healthcare (Switzerland)*, 11(9). Tersedia pada: <https://doi.org/10.3390/HEALTHCARE11091322>.
- Susanti, P. dkk. (2022) “Analysis of Factors Affecting Life Style on Obesity in Global Prima National Plus School Medan in 2018,” *International Journal of Health and Pharmaceutical (IJHP)*, 2(4), hal. 723–729. Tersedia pada: <https://doi.org/10.51601/IJHP.V2I4.85>.
- Syofian, M. dan Maulana, I. (2024) “Enhancing Obesity Risk Classification: Tackling Data Imbalance with SMOTE and Deep Learning,” *Jurnal Riset Informatika*, 6(4), hal. 231–236. Tersedia pada: <https://doi.org/10.34288/JRI.V6I4.349>.
- Tanzila, R.A., Gunawan, E.P. dan Khairani, A. (2021) “Factors Related to Vital Lung Capacity of Workers at Fertilizer X Factory in Indonesia,” *Majalah Kedokteran Bandung*, 53(1). Tersedia pada: <https://doi.org/10.15395/MKB.V53N1.2219>.
- Tondo, P. dkk. (2025) “Sex and gender differences during the lung lifespan: unveiling a pivotal impact,” *European Respiratory Review*, 34(175). Tersedia pada: <https://doi.org/10.1183/16000617.0121-2024>.
- Treister-Goltzman, Y., Menashe, I. dan Nemet, D. (2025) “Adolescent Obesity and Charlson Comorbidity Index in Young Adults,” *Journal of Clinical Medicine*, 14(3). Tersedia pada: <https://doi.org/10.3390/JCM14030873>.

- Upadhyay, M.P. dkk. (2022) “Abdominal Obesity among Outpatients in a Tertiary Level Eye ENT Hospital: A Descriptive Cross-sectional Study,” *Journal of Nepal Medical Association*, 60(245), hal. 63–67. Tersedia pada: <https://doi.org/10.31729/JNMA.7253>.
- Valle, N.C.A. Del dkk. (2025) “Beyond BMI: a comprehensive approach to pediatric obesity assessment,” *Frontiers in Pediatrics*, 13, hal. 1597309. Tersedia pada: <https://doi.org/10.3389/FPED.2025.1597309>.
- Verma, M. dkk. (2025) “Comprehending the Epidemiology and Aetiology of Childhood Obesity: Integrating Life Course Approaches for Prevention and Intervention,” *Diabetes therapy: research, treatment and education of diabetes and related disorders*, 16(6), hal. 1177–1206. Tersedia pada: <https://doi.org/10.1007/S13300-025-01734-7>.
- Wang, C., Chen, H. dan Shang, S. (2023) “Association between depression and lung function in college students,” *Frontiers in Public Health*, 11. Tersedia pada: <https://doi.org/10.3389/FPUBH.2023.1093935/PDF>.
- Wang, J. dkk. (2021) “Relationship between lung function impairment, hypertension, and major adverse cardiovascular events: A 10-year follow-up study,” *Journal of clinical hypertension (Greenwich, Conn.)*, 23(10), hal. 1930–1938. Tersedia pada: <https://doi.org/10.1111/JCH.14364>.
- Weatherald, J., Riha, R.L. dan Humbert, M. (2021) “Sex and gender in lung health and disease: more than just Xs and Ys,” *European Respiratory Review*, 30(162). Tersedia pada: <https://doi.org/10.1183/16000617.0217-2021>.
- Wichum, F., Wiede, C. dan Seidl, K. (2022) “Depth-Based Measurement of Respiratory Volumes: A Review,” *Sensors*, 22(24). Tersedia pada: <https://doi.org/10.3390/S22249680>.
- Widiaristy, D. dkk. (2023) “Risk Factors Affecting Pulmonary Disorders of Workers In Indonesia: Literature Review 2017-2022,” *Jurnal Ilmu Kesehatan Masyarakat*, 14(3), hal. 263–280. Tersedia pada: <https://doi.org/10.26553/JIKM.2023.14.2.263-280>.
- Wongta, A. dkk. (2025) “Associations Between Metabolic Risk Factors and Lung Function Among Adults in Northern Thailand: A Cross-Sectional Study,” *Healthcare*, 13(14). Tersedia pada: <https://doi.org/10.3390/HEALTHCARE13141671>.
- Wu, X. dkk. (2024) “Trends in prevalence of obesity and its association with hypertension across socioeconomic gradients in rural Yunnan Province, China,” *BMC Cardiovascular Disorders*, 24(1). Tersedia pada: <https://doi.org/10.1186/S12872-024-03741-1>.
- Xiang, M. dkk. (2023) “The intersection of obesity and (long) COVID-19: Hypoxia, thrombotic inflammation, and vascular endothelial injury,” *Frontiers in Cardiovascular Medicine*, 10. Tersedia pada: <https://doi.org/10.3389/FCVM.2023.1062491/PDF>.
- Yang, Y. dkk. (2024) “Association Between Triglyceride-Glucose Index and Lung Function Parameters in the General Population Undergoing Health Examinations,” *Diabetes, Metabolic Syndrome and Obesity*, 17(October), hal. 4031–4047. Tersedia pada: <https://doi.org/10.2147/DMSO.S487744>.
- Zeng, B. dkk. (2023) “Exploring the acoustic and prosodic features of a lung-function-sensitive repeated-word speech articulation test,” *Frontiers in Psychology*, 14. Tersedia pada:

<https://doi.org/10.3389/FPSYG.2023.1167902>.

- Zhang, L. dkk. (2023) “Ceramides and metabolic profiles of patients with acute coronary disease: a cross-sectional study,” *Frontiers in Physiology*, 14. Tersedia pada: <https://doi.org/10.3389/FPHYS.2023.1177765>.
- Zhang, X. dkk. (2022) “Age-related circadian rhythm and variability of large- and small-airway function in healthy non-smoking adults: Data from 7-day diurnal and nocturnal home monitoring using an electronic portable spirometer,” *Frontiers in Public Health*, 10. Tersedia pada: <https://doi.org/10.3389/FPUBH.2022.946988/PDF>.
- Zhou, J. dkk. (2024) “Associations between metabolic score for visceral fat and adult lung functions from NHANES 2007–2012,” *Frontiers in Nutrition*, 11. Tersedia pada: <https://doi.org/10.3389/FNUT.2024.1436652>.