



DAFTAR PUSTAKA

- Aroor, A, R, Jia, G, & Sowers, J, R 2018, 'Cellular mechanisms underlying obesity-induced arterial stiffness', *Am J Physiol Regul Integr Comp Physiol*, vol. 314, pp. R387–R398
- Ashwell M, mayhew L, Richardson J, Rickayzen B 2014. *Waist to height ratio is more predictive of years of life lost than body mass index*. PLOS ONE 9(9)
- Aulia R, & Windarwati, S, U 2014, *TyG-Index untuk diagnosis resistensi insulin pada karyawan RSUP Dr. Sardjito Yogyakarta*, Universitas Gadjah Mada
- Baba, M, Maris, M, Jianu, D, Luca, C, T, Stoian, D, & Mozos, L 2023, 'The impact of the blood lipids levels on arterial stiffness', *J Cardiovasc Dev Dis*, vol. 10, pp. 127
- Bonora E, Kiechl S, Willeit J, Oberhollenzer F, Egger G, & Targher G 1998, 'Prevalence of insulin resistance in metabolic disorders: the Bruneck Study', *Diabetes*, vol. 47, no. 10, pp. 643e9
- Bortel, L, M, V, Laurent, S, Boutouyrie, P, Chowienczyk, P, Cruickshank, J, K, & Backer, T, D 2012, Expert consensus document on the measurement of aortic stiffness in daily practice using carotid-femoral pulse wave velocity *Journal of Hypertension*, vol. 30, pp. 445-48
- Bosomworth N J 2019. *Normal-weight central obesity unique hazard of the toxic waist*. Canadian Family Physician Le Medecin de famille canadien 65, pp 400-407
- Brillante, D, G, Sullivan, A, J O, Howes, L, G 2009, 'Arterial stiffness in insulin resistance: The role of nitric oxide and angiotensin II receptors', *Vascular Health and Risk Management* vol. 5, pp. 73-78
- Busebee B, Ghun W, Cifuentes L, & Acosta A 2023, 'Obesity: A Review of Pathophysiology and Classification', *Mayo Clin Proc* vol. 98, no. 12, pp. 1842-57
- Calabia J, Torguet P, Garcia M, Garcia M, Martin N, Guasch B *et al* 2011. Doppler ultrasound in the measurement of pulse wave velocity: agreement with the complior method. *Cardiovascular Ultrasound*; 9;13
- Chiefari, E, Mirabelli, M, Vignera, S, L, Tanyolac, S, & Foti, D, P 2021, 'Insulin resistance and cancer: in search for a causal link', *Int J Mol Sci*, vol. 22, pp. 11137
- Chou, C, Y, Yang, Y, C, Wu, J, S, Sun, Z, J, Lu, F, H, & Chang, C, J 2015, 'Non alcoholic fatty liver disease associated with increased arterial stiffness in subjects with normal glucose tolerance, but not prediabetes and diabetes', *Diabetes & Vascular Disease Research*, vol. 12, no. 5, pp. 359-365



- Dahlan, M, S 2014, *Besar sampel dalam penelitian kedokteran dan kesehatan*. Edisi 3, Salemba Medika, Jakarta.
- DeFronzo, R, A, Tobin, J, D, & Andres, R 1979, 'Glucose clamp technique: a method for quantifying insulin secretion and resistance', *Am J Physiol Endocrinol Metabol*, vol. 237, no. 3, pp. E214
- Diaz A, Tringler M, Wray S, Ramirez A,J, Fischer E, I, C, 2017. The effects of age on pulse wave velocity in untreated hypertension. *J Clin Hypertens*. 2018;20:258–265
- Direktorat Pencegahan dan Pengendalian Penyakit Tidak Menular 2015, *Pedoman Umum Pengendalian Obesitas*, Ditjen Pencegahan dan Pengendalian Penyakit
- Direktorat Pencegahan dan Pengendalian Penyakit Tidak Menular 2023, *Panduan Hari Obesitas Sedunia Tahun 2023*, World Obesity Day 4 Maret 2023, (<https://ayosehat.kemkes.go.id/buku-panduan-hari-obesitas-sedunia-2023>)
- Doonan, R, J, Hausvater, A, Scallan, C, Mikhailidis, D,P, Pilote, L, & Daskalopoulou, S, S 2010, 'The effect of smoking on arterial stiffness. Hypertension Research', vol. 33, pp. 398-410
- DuPont, J, J, Kenney, R, M, Patel, A, R, & Jaffe, I, Z 2019, 'Sex Differences in Mechanisms of Arterial Stiffness', *Br J Pharmacol*, vol. 176, pp. 4208-25
- Eikas, J, G, Gerdt, E, Halland, H, Midtbe, H, Cramariu, D, & Kringeland, E 2023, 'Arterial stiffness in overweight and obesity: association with sex, age, and blood pressure', *High Blood Pressure & Cardiovascular Prevention*, vol. 30, pp. 435–443
- Gadde, K, M, Martin, C, K, Berthoud, H, R, Heymsfield, S, B 2018, 'Obesity Pathophysiology and Management', *JACC*, vol. 71, no. 1, pp. 69-84
- Heymsfield S, B, & Wadden, T, H 2017, 'Mechanisms, Pathophysiology, and Management of Obesity', *N Engl J Med*, no. 376, pp. 254-66
- Huang W, Gan Z, Gao Z, Lin Q, Li X, Xie W *et al* 2024. *Discrepancies between general and central obesity in arterial stiffness: observational studies and mendelian randomization study*. *BMC Medicine* 2024; 22; 325
- Herzog M, J, Muller P, Lechner K, Stiebler M, Arndt P, Kunz M, *et al*. Arterial stiffness and vascular aging: mechanisms, prevention, and therapy. *Signal Transduction and Targeted Therapy* (2025) 10:282
- Hwang, C, L, Muchira, J, Hibner, B, A, Philips, S, A, & Piano, M, R 2022, 'Alcohol consumption: a new risk factor for arterial stiffness', *Cardiovascular Toxicology*, vol. 22, pp. 236-45



- Khan, S, H, Sobia F, Niazi, N, K, Manzoor, S, M, Fazal N, & Ahmad F 2018, 'Metabolic clus tering of risk factors: evaluation of triglyceride-glucose index (TyG index) for evaluation of insulin resistance 11 medical and health sciences 1103 clinical sciences', *Diabetol Metab Syndrome*, vol. 10, no. 1, pp. 1e8
- Kim Hack Lyoung 2023. Arterial stiffness and hypertension. *Clinical Hypertension* 29:31
- Laurent, S, Boutouyrie, P, Asmar, R, Gautier, I, Laloux, B, & Guize L 2001, 'Aortic stiffness is an independent predictor of all-cause and cardiovascular mortality in hypertensive patients', *Hypertension*, vol. 37, pp. 1236-41
- Lee Sang Bae, Ahn Chul Woo, Lee Byoung Kwon, Kang S, Nam Ji Sun, You Ji H, *et al* 2018. Association between triglyceride glucose index and arterial stiffness in Korean adults. *Cardiovasc Diabetol*; 17;41
- Li R, Li Q, Cui M, Yin Z, Li L, & Zhong T 2018, 'Clinical surrogate markers for predicting metabolic syndrome in middle-aged and elderly Chinese', *J Diabetes Invest*, vol. 9, no. 2, pp. 411e8
- Lin, X, & Li, H 2021, 'Obesity: Epidemiology, Pathophysiology, and Therapeutics', *Frontiers in Endocrinology*, Vol. 12, pp. 706978
- Maruhashi, T, & Higashi, Y 2024, 'Is uric acid a causal risk factor of arterial stiffness in patients with hypertension?', *Hypertension Research*, vol. 47, pp. 1570-72
- Matthews, D, R, Hosker, J, P, Rudenski, A, A, Naylor, B, A, Treacher, D, F, & Turner, R, C 1985, 'Homeostasis model assessment: insulin resistance and beta-cell function from fasting plasma glucose and insulin concentrations in man', *Diabetologia*, vol. 28, no. 7, pp. 412-419
- Matsui M, Yoshikawa T, Mizushima R, Tanahashi K, Myoenzono K, Tanaka K, *et al* 2019. Association between duration of excessive weight and arterial stiffness in middle-aged and older adults. *Clinical and Experimental Hypertension*
- Mitchell, G, F, Hwang, S, J, Vasan, R, S, Larson, M, G, Pencina, M, J, & Hamburg, N, M 2010, 'Arterial stiffness and cardiovascular events: The Framingham Heart Study', *Circulation*, vol. 121, no. 4, pp. 505-11
- Morena, C, P, Redondo, I, C, Garcia, I, M, Gutierrez, E, R, Torres, M, L, L, & Herraiz, N, M 2024, 'Exploring the influence of insulin resistance on arterial stiffness in healthy adults: from the metabolic and cardiovascular health insights of the evascu study', *Nutrients*, vol. 16, no. 791, pp. 1-10



- Nakagomi, A, Sunami, Y, Kawasaki, Y, Fujisawa, T, Kobayashi, Y 2019, 'Sex difference in the association between surrogate markers of insulin resistance and arterial stiffness', *Journal of Diabetes and Its Complications*
- Nogueira, C, A, V, Leite, N, C, Cardoso, C, R, L, Salles, G, G 2016, 'NAFLD and increased aortic stiffness: parallel or common physiopathological mechanisms', *Int J Mol Sci*, vol. 17, pp. 460
- Podolec P, Kopec G, Podolec J, Wilkolek P, Krochin M, Rubis P *et al* 2007. *Aortic Pulse Wave Velocity and Carotid-Femoral Pulse Wave Velocity: Similarities and Discrepancies*. *Hypertens Res* 30, pp. 1151-1158
- Ramirez A,J, Christen A,I, Sanchez R,A, 2018. Serum Uric Acid Elevation is Associated to Arterial Stiffness in Hypertensive Patients with Metabolic Disturbances. *Current Hypertension Reviews*, 14, 154-160
- Reis J,P, Loria C,M, Lewis C,E, Wiley T,M,P, Wei G,S, Carr J, *et al*. 2013. Association Between Duration of Overall and Abdominal Obesity Beginning in Young Adulthood and Coronary Artery Calcification in Middle Age. *JAMA*. 17; 310(3): 280–288
- Romero, F, G, Molina, R, V, Flores, J, R, J, Mendia, L, E, S, Cruz, R, M, & Romero, M, M 2016, 'Fasting triglycerides and glucose index as a diagnostic test for insulin resistance in young adults', *Archives of Medical Research* vol. 47, pp. 382-7
- Safar, M, E, Asmar, R, Benetos, A, Blacher, J, Boutouyrie, P, & Lacolley, P 2018, 'Interaction between hypertension and arterial stiffness an expert reappraisal', *Hypertension*, vol. 72, pp. 796-805
- Sajdeya O, Beran A, Mhanna M, Alharbi A, Burmeister C, Abuhelwa Z, *et al*. 2022. Triglyceride Glucose Index for the Prediction of Subclinical Atherosclerosis and Arterial Stiffness: A Meta-analysis of 37,780 Individuals. *Curr Probl Cardiol*;47:101390
- Schutte R, Zhang J, Kiran M, Ball G 2024. Alcohol and arterial stiffness in middle- aged and older adults: Cross- sectional evidence from the UK Biobank study. *Alcohol Clin Exp Res*. 2024;48:1915–1922
- Seals, D, R, DeSouza, C, A, Donato, A, J, & Tanaka, H 2008, 'Habitual exercise and arterial aging', *J Appl Physiol*, vol. 105, pp. 1323-32
- Sugiura T, Dohi Y, Takase H, Yamashita S, Fujii S, Ohte N 2017. Oxidative stress is closely associated with increased in aged male smokers without previous cardiovascular events a cross sectional study. *J atheroscler Thromb* 24: 1186-1198
- Sun, Y, Ji, H, & Sun, W 2025, 'An Xuedong, Lian Fengmei. Triglyceride glucose (TyG) index: A promising biomarker for diagnosis and treatment of



different diseases', *European Journal of Internal Medicine*, vol. 131, pp. 3–14

Tahapary, D, L, Pratisthita, L, B, , Fitri, N, A, Marcella, C, Wafa, S, & Kurniawan, F 2022, 'Challenges in the diagnosis of insulin resistance: Focusing on the role of HOMA-IR and Tryglyceride/glucose index', *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, vol. 16, pp. 102581

Tao, L, C, Xu, J, Wang, T, T, Hua, F, & Li, J, J 2022, 'Triglyceride-glucose index as a marker in cardiovascular diseases: landscape and limitations', *Cardiovascular Diabetology*, vol. 21, no. 68, pp. 1-17

Wang, S, Shi, J, Peng, Y, Fang, Q, Mu, Q, & Gu, W 2021, 'Stronger association of triglyceride glucose index than the HOMA-IR with arterial stiffness in patients with type 2 diabetes: a real-world single-centre study', *Cardiovasc Diabetol*, vol. 20, pp. 82

Yu, X, Zhao, Y, Song, X, & Song, Z 2014, 'Association between non alcoholic fatty liver disease and arterial stiffness in the non obese, non hypertensive, and non diabetic young and middle aged chinese population', *J Zhejiang Univ Sci B (biomed & biotechnol)*, vol. 15, no. 10, pp. 879-887

Zhang, Y, Liu, J, Yao, J, Ji, G, Qian, L, & Wang, J 2014, 'Obesity: Pathophysiology and Intervention', *Nutrients*, vol. 6, pp. 5153-83