

DAFTAR PUSTAKA

1. Soegondo S, Purnamasari D. Sindrom Metabolik. In: Buku Ajar Ilmu Penyakit Dalam. 5th ed. Interna Publishing; 2014. p. 1865–72.
2. Palatini P. Glomerular hyperfiltration: a marker of early renal damage in pre-diabetes and pre-hypertension. *Nephrology Dialysis Transplantation*. 2012 May 1;27(5):1708–14.
3. Okada R, Yasuda Y, Tsushita K, Wakai K, Hamajima N, Matsuo S. Glomerular hyperfiltration in prediabetes and prehypertension. *Nephrology Dialysis Transplantation*. 2012 May 1;27(5):1821–5.
4. Levey AS, Inker LA, Coresh J. GFR Estimation: From Physiology to Public Health. *American Journal of Kidney Diseases*. 2014 May;63(5):820–34.
5. Janssen JAMJL. Hyperinsulinemia and Its Pivotal Role in Aging, Obesity, Type 2 Diabetes, Cardiovascular Disease and Cancer. *IJMS*. 2021 Jul 21;22(15):7797.
6. Corkey BE. Banting Lecture 2011. *Diabetes*. 2012 Jan 1;61(1):4–13.
7. Nolan CJ, Ruderman NB, Kahn SE, Pedersen O, Prentki M. Insulin Resistance as a Physiological Defense Against Metabolic Stress: Implications for the Management of Subsets of Type 2 Diabetes. *Diabetes*. 2015 Mar 1;64(3):673–86.
8. Spoto B, Pisano A, Zoccali C. Insulin resistance in chronic kidney disease: a systematic review. *American Journal of Physiology-Renal Physiology*. 2016 Dec 1;311(6):F1087–108.
9. Kubo M, Kiyohara Y, Kato I, Iwamoto H, Nakayama K, Hirakata H, et al. Effect of hyperinsulinemia on renal function in a general Japanese population: The Hisayama study. *Kidney International*. 1999 Jun;55(6):2450–6.
10. Forbes JM, Coughlan MT, Cooper ME. Oxidative Stress as a Major Culprit in Kidney Disease in Diabetes. *Diabetes*. 2008 Jun 1;57(6):1446–54.
11. De Cosmo S, Menzaghi C, Prudente S, Trischitta V. Role of insulin resistance in kidney dysfunction: insights into the mechanism and epidemiological evidence. *Nephrology Dialysis Transplantation*. 2013 Jan 1;28(1):29–36.
12. Kim HJ, Ryu J, Ahn SY, Kim S, Lim S, Na KY, et al. Association of Insulin Resistance with Lower Glomerular Filtration Rate and All-Cause Mortality in the Korean Elderly Population: A Community-Based Prospective Cohort Study. *Tohoku J Exp Med*. 2013;231(4):271–9.

13. Naderpoor N, Lyons JG, Mousa A, Ranasinha S, de Courten MPJ, Soldatos G, et al. Higher glomerular filtration rate is related to insulin resistance but not to obesity in a predominantly obese non-diabetic cohort. *Sci Rep.* 2017 Apr 3;7(1):45522.
14. Tucker BJ, Anderson CM, Thies RS, Collins RC, Blantz RC. Glomerular hemodynamic alterations during acute hyperinsulinemia in normal and diabetic rats. *Kidney Int.* 1992 Nov;42(5):1160–8.
15. Cohen AJ, McCarthy DM, Stoff JS. Direct hemodynamic effect of insulin in the isolated perfused kidney. *American Journal of Physiology-Renal Physiology.* 1989 Oct 1;257(4):F580–5.
16. Dengel DR, Goldberg AP, Mayuga RS, Kairis GM, Weir MR. Insulin resistance, elevated glomerular filtration fraction, and renal injury. *Hypertension.* 1996 Jul;28(1):127–32.
17. Moller DE, Flier JS. Insulin resistance--mechanisms, syndromes, and implications. *N Engl J Med.* 1991 Sep 26;325(13):938–48.
18. Ohmori S, Kiyohara Y, Kato I, Ohmura T, Iwamoto H, Nakayama K, et al. Hyperinsulinaemia and blood pressure in a general Japanese population: the Hisayama Study. *J Hypertens.* 1994 Oct;12(10):1191–7.
19. Aguilar M, Bhuket T, Torres S, Liu B, Wong RJ. Prevalence of the Metabolic Syndrome in the United States, 2003-2012. *JAMA.* 2015 May 19;313(19):1973.
20. Tomaszewski M, Charchar FJ, Maric C, McClure J, Crawford L, Grzeszczak W, et al. Glomerular hyperfiltration: A new marker of metabolic risk. *Kidney International.* 2007 Apr;71(8):816–21.
21. Nerpin E, Risérus U, Ingelsson E, Sundström J, Jobs M, Larsson A, et al. Insulin Sensitivity Measured With Euglycemic Clamp Is Independently Associated With Glomerular Filtration Rate in a Community-Based Cohort. *Diabetes Care.* 2008 Aug 1;31(8):1550–5.
22. Melsom T, Mathisen UD, Ingebretsen OC, Jenssen TG, Njølstad I, Solbu MD, et al. Impaired Fasting Glucose Is Associated With Renal Hyperfiltration in the General Population. *Diabetes Care.* 2011 Jul 1;34(7):1546–51.
23. Brands MW, Manhiani MM. Sodium-retaining effect of insulin in diabetes. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology.* 2012 Dec 1;303(11):R1101–9.
24. Guo J, Breen DM, Pereira TJ, Dalvi PS, Zhang H, Mori Y, et al. The effect of insulin to decrease neointimal growth after arterial injury is endothelial nitric oxide synthase-dependent. *Atherosclerosis.* 2015 Jul;241(1):111–20.

25. Fornes R, Ormazabal P, Rosas C, Gabler F, Vantman D, Romero C, et al. Changes in the Expression of Insulin Signaling Pathway Molecules in Endometria from Polycystic Ovary Syndrome Women with or without Hyperinsulinemia. *Mol Med*. 2010 Mar;16(3–4):129–36.
26. Hansen BC, Jen KLC, Pek SB, Wolfe RA. Rapid Oscillations in Plasma Insulin, Glucagon, and Glucose in Obese and Normal Weight Humans*. *The Journal of Clinical Endocrinology & Metabolism*. 1982 Apr;54(4):785–92.
27. Pørksen N, Nyholm B, Veldhuis JD, Butler PC, Schmitz O. In humans at least 75% of insulin secretion arises from punctuated insulin secretory bursts. *American Journal of Physiology-Endocrinology and Metabolism*. 1997 Nov 1;273(5):E908–14.
28. Janssen JAMJL. New Insights into the Role of Insulin and Hypothalamic-Pituitary-Adrenal (HPA) Axis in the Metabolic Syndrome. *IJMS*. 2022 Jul 25;23(15):8178.
29. Freeman AM, Pennings N. Insulin Resistance. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 [cited 2021 Dec 16]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK507839/>
30. Bermudez V, Salazar J, Martínez MS, Chávez-Castillo M, Olivar LC, Calvo MJ, et al. Prevalence and Associated Factors of Insulin Resistance in Adults from Maracaibo City, Venezuela. *Adv Prev Med*. 2016;2016.
31. Lee JM, Okumura MJ, Davis MM, Herman WH, Gurney JG. Prevalence and Determinants of Insulin Resistance Among U.S. Adolescents. *Diabetes Care*. 2006 Nov 1;29(11):2427–32.
32. Abbasi F, Okeke Q, Reaven GM. Evaluation of fasting plasma insulin concentration as an estimate of insulin action in nondiabetic individuals: comparison with the homeostasis model assessment of insulin resistance (HOMA-IR). *Acta Diabetol*. 2014 Apr;51(2):193–7.
33. Gayoso-Diz P, Otero-González A, Rodriguez-Alvarez MX, Gude F, García F, De Francisco A, et al. Insulin resistance (HOMA-IR) cut-off values and the metabolic syndrome in a general adult population: effect of gender and age: EPIRCE cross-sectional study. *BMC Endocr Disord*. 2013 Dec;13(1):47.
34. Kurniawan LB, Adnan E, Windarwati, Mulyono B. Insulin resistance and testosterone level in Indonesian young adult males. *Romanian Journal of Internal Medicine*. 2020 Jun 1;58(2):93–8.
35. Johnson AMF, Olefsky JM. The origins and drivers of insulin resistance. *Cell*. 2013 Feb 14;152(4):673–84.

36. Puspitaningrum LS, Tjahjono K, Candra A. Pengaruh Pemberian Ekstrak Daun Kelor (Moringa Oleifera) Terhadap Kadar Ureum Dan Kreatinin Serum Tikus Wistar Yang Diinduksi Formalin. Diponegoro Medical Journal (Jurnal Kedokteran Diponegoro). 2018;7(2):777–86.
37. Barrett KE, Barman SM, Boitano S, Brooks HL. Renal Function & Micturition. In: Ganong's Review of Medical Physiology. 25th ed. McGraw-Hill Education; p. 676–7.
38. Stevens PE. Evaluation and Management of Chronic Kidney Disease: Synopsis of the Kidney Disease: Improving Global Outcomes 2012 Clinical Practice Guideline. Ann Intern Med. 2013 Jun 4;158(11):825.
39. Levey AS, Stevens LA, Schmid CH, Zhang Y (Lucy), Castro AF, Feldman HI, et al. A New Equation to Estimate Glomerular Filtration Rate. Ann Intern Med. 2009 May 5;150(9):604.
40. Estimating Glomerular Filtration Rate | NIDDK [Internet]. National Institute of Diabetes and Digestive and Kidney Diseases. [cited 2022 Aug 13]. Available from: <https://www.niddk.nih.gov/health-information/professionals/clinical-tools-patient-management/kidney-disease/laboratory-evaluation/glomerular-filtration-rate/estimating>
41. Levey AS, Coresh J, Greene T, Stevens LA, Zhang Y (Lucy), Hendriksen S, et al. Using Standardized Serum Creatinine Values in the Modification of Diet in Renal Disease Study Equation for Estimating Glomerular Filtration Rate. Ann Intern Med. 2006 Aug 15;145(4):247–54.
42. Rule AD, Bailey KR, Schwartz GL, Khosla S, Lieske JC, Melton LJ. For estimating creatinine clearance measuring muscle mass gives better results than those based on demographics. Kidney International. 2009 May;75(10):1071–8.
43. Baumann U, Eisenhauer T, Hartmann H. Increase of glomerular filtration rate and renal plasma flow by insulin-like growth factor-1 during euglycaemic clamping in anaesthetized rats. Eur J Clin Invest. 1992 Mar;22(3):204–9.
44. Wahba IM, Mak RH. Obesity and Obesity-Initiated Metabolic Syndrome: Mechanistic Links to Chronic Kidney Disease. CJASN. 2007 May;2(3):550–62.
45. Helal I, Fick-Brosnahan GM, Reed-Gitomer B, Schrier RW. Glomerular hyperfiltration: definitions, mechanisms and clinical implications. Nat Rev Nephrol. 2012 Feb 21;8(5):293–300.
46. Ruggenenti P, Porrini EL, Gaspari F, Motterlini N, Cannata A, Carrara F, et al. Glomerular Hyperfiltration and Renal Disease Progression in Type 2 Diabetes. Diabetes Care. 2012 Oct;35(10):2061–8.

47. Chaiken RL, Eckert-Norton M, Bard M, Banerji MA, Palmisano J, Sachimechi I, et al. Hyperfiltration in African-American Patients With Type 2 Diabetes: Cross-sectional and longitudinal data. *Diabetes Care*. 1998 Dec 1;21(12):2129–34.
48. Hjorth L, Wiebe T, Karpman D. Hyperfiltration evaluated by glomerular filtration rate at diagnosis in children with cancer: Renal Function in Children With Cancer. *Pediatr Blood Cancer*. 2011 May;56(5):762–6.
49. Huang SHS, Sharma AP, Yasin A, Lindsay RM, Clark WF, Filler G. Hyperfiltration Affects Accuracy of Creatinine eGFR Measurement. *CJASN*. 2011 Feb;6(2):274–80.
50. Kopp JB, Smith MW, Nelson GW, Johnson RC, Freedman BI, Bowden DW, et al. MYH9 is a major-effect risk gene for focal segmental glomerulosclerosis. *Nat Genet*. 2008 Oct;40(10):1175–84.
51. Tzur S, Rosset S, Shemer R, Yudkovsky G, Selig S, Tarekgn A, et al. Missense mutations in the APOL1 gene are highly associated with end stage kidney disease risk previously attributed to the MYH9 gene. *Hum Genet*. 2010 Sep;128(3):345–50.
52. Siméon S, Massy Z, Højlund K, Lalic K, Porcellati F, Dekker J, et al. Renal function markers and insulin sensitivity after 3 years in a healthy cohort, the EGIR-RISC study. *BMC Nephrology*. 2018 May 31;19(1):124.
53. Johns BR, Pao AC, Kim SH. Metabolic syndrome, insulin resistance and kidney function in non-diabetic individuals. *Nephrology Dialysis Transplantation*. 2012 Apr 1;27(4):1410–5.
54. Chen S, Chen Y, Liu X, Li M, Wu B, Li Y, et al. Association of Insulin Resistance with Chronic Kidney Disease in Non-Diabetic Subjects with Normal Weight. *PLOS ONE*. 2013 Sep 13;8(9):e74058.
55. Park JH, Oh SW, Ahn SY, Kim S, Na KY, Chae DW, et al. Decreased estimated glomerular filtration rate is not directly related to increased insulin resistance. *Diabetes Research and Clinical Practice*. 2013 Mar;99(3):366–71.
56. Onat A, Hergenç G, Uyarel H, Özhan H, Esen AM, Karabulut A, et al. Association between Mild Renal Dysfunction and Insulin Resistance or Metabolic Syndrome in a Random Nondiabetic Population Sample. *KBR*. 2007;30(2):88–96.
57. Kovacs CP, Furth SL, Zoccali C, on behalf of the World Kidney Day Steering Committee. Obesity and Kidney Disease: Hidden Consequences of the Epidemic. *Can J Kidney Health Dis*. 2017 Jan;4:205435811769866.