

DAFTAR PUSTAKA

1. Association A.D. Classification and diagnosis of diabetes: Standards of medical care in Diabetes 2018. *Diabetes Care*. 2018;41:13–27.
2. Krisnatuti, D., Rasjmida, D., & Yenrina, R. *Diet Sehat untuk Penderita Diabetes Mellitus*. Jakarta Timur: Penebar Swadaya. 2014.
3. International Diabetes Federation. *IDF Diabetes Atlas Seventh Edition 2015*. Brussels: International Diabetes Federation. 2015.
4. Zhou B, Lu Y, Hajifathalian K, Bentham J, Di Cesare M, Danaei G, et al.. Worldwide Trends in Diabetes Since 1980: A Pooled Analysis of 751 Population-Based Studies With 4.4 Million Participants. *Lancet*. 2016; 387(10027):1513–30.
5. Dabelea D. Diabetes in youth-looking backwards to inform the future: Kelly West Awardlecture 2017. *Diabetes care*. 2018.233-40.
6. Reinehr T. Type 2 diabetes mellitus in children and adolescent. *World J. Diabetes*. 2013. 4(6): 270-81
7. WHO . Diabetes. World Health Organization (Who) Report (2018). <https://www.who.int/news-room/fact-sheets/detail/diabetes>.
8. Lawrence JM, Imperatore G, Pettitt DJ. Incidence of diabetes in United States youth by diabetes type, race/ethnicity, and age, 2008–2009. *Diabetes*. 2014;63.
9. Dabelea D, Mayer-Davis EJ, Saydah S. SEARCH for Diabetes in Youth Study . Prevalence of type 1 and type 2 diabetes among children and adolescents from 2001 to 2009. *JAMA*. 2014;311:1778–86.
10. Pettitt DB, Klingensmith GJ, Bell RA. SEARCH for Diabetes in Youth Study Group Glycemic control in youth with diabetes: the SEARCH for Diabetes in Youth Study. *J Pediatr*. 2009;155:668–72.
11. Hamman RF, Bell RA, Dabelea D. SEARCH for Diabetes in Youth Study Group . The SEARCH for Diabetes in Youth study: rationale, findings, and future directions. *Diabetes Care*. 2014;37:3336–44.

12. Fu J, Prasad HC. Changing epidemiology of metabolic syndrome and type 2 diabetes in Chinese youth. *Curr Diab Rep.* 2014;14:447.
13. Prasad AN. Type 2 diabetes mellitus in young need for early screening. *Indian Pediatr.* 2011;48:683–8.
14. Hardy OT, Ceko MP, Corvera S. Apa yang menyebabkan resistensi insulin yang mendasari obesitas?. *Curr Opin Endokrinol Diabetes Obes.* 2012; 19 :81–7.
15. Rosenbloom A.L., Silverstein J.H., Amemiya S., Zeitler P., Klingensmith G.J. International Society for Pediatric and Adolescent Diabetes. ISPAD Clinical practice consensus guidelines 2006-2007. Type 2 diabetes mellitus in the child and adolescent. *Pediatr. Diabetes.* 2008;9(5):512–26.
16. Jones K.L., Arslanian S., Peterokova V.A., Park J.S., Tomlinson M.J. Effect of metformin in pediatric patients with type 2 diabetes: a randomized controlled trial. *Diabetes Care.* 2002;25(1):89–94.
17. Bacha F., Gungor N., Lee S., Arslanian S.A. Progressive deterioration of β -cell function in obese youth with type 2 diabetes. *Pediatr. Diabetes.* 2013;14(2):106–11.
18. Zeitler P., Hirst K., Pyle L. TODAY Study Group. A clinical trial to maintain glycemic control in youth with type 2 diabetes. *N. Engl. J. Med.* 2012;366(24):2247–56.
19. Ripsin C.M., Kang H., Urban R.J. Management of blood glucose in type 2 diabetes mellitus. *Am. Fam. Physician.* 2009;79(1):29–36.
20. Reinehr T. Type 2 diabetes mellitus in children and adolescents. *World J. Diabetes.* 2013;4(6):270–81.
21. Albers J.J., Marcovina S.M., Imperatore G., et al. Prevalence and determinants of elevated apolipoprotein B and dense low-density lipoprotein in youths with type 1 and type 2 diabetes. *J. Clin. Endocrinol. Metab.* 2008;93(3):735–42.
22. Frankenberg ADV, Reis AF, Gerchman F. Relationships between adiponectin levels, the metabolic syndrome, and type 2 diabetes: a literature review. *Arch Endocrinol Metab.* 2017;61:614–22.

23. Eckel N, Muhlenbruch K, Meidtnr K, Boeing H, Stefan N, Schulze MB. Characterization of metabolically unhealthy normal-weight individuals: risk factors and their associations with type 2 diabetes. *Metabolism*. 2015;64:862–71.
24. Dabelea D. Diabetes in youth-looking backwards to inform the future: Kelly West Award Lecture 2017. *Diabetes Care*. 2018;41: 233–40.
25. Pulungan AB, Puspitadewi A, Sekartini R. Prevalensi resistensi insulin pada remaja obesitas. *Pediatr Indonesia*. 2013; 53:167–72.
26. Prastowo NA, Haryono IR. Elevated blood pressure and its relationship with bodyweight and anthropometric measurements among 8±11-year-old Indonesian school children. *Journal of Public Health Research*. 2020;9(1):7–13.
27. Mohammed MS, Sendra S, Lloret J, Bosch I. Systems and WBANs for controlling obesity. *Journal of Healthcare Engineering*. 2018;2018.
28. Tirtamulia KS, Umboh A, Warous SM, Pateda V, Regina F. Achantosis nigricans dan resistensi insulin pada anak obesitas. *Pediatr Indonesia*. 2010; 50 :274–7.
29. Perkeni. *Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia*. Jakarta: PB Perkeni. 2021.
30. Julia Madarina, Agustini U, Anang GM, Nur R. *Konsensus Nasional Pengelolaan Diabetes Melitus Tipe 2 pada Anak dan Remaja*. Jakarta: UKK Endokrinologi Anak dan Remaja. 2015.
31. Fatimah RN. *Diabetes Melitus Tipe 2*. 2015: 4(5)
32. World Health Organization (WHO). Recognizing adolescence [Internet]. [cited 2022 Okt 27].
https://www.who.int/health-topics/adolescenthealth#tab=tab_1
33. Pulerwitz J, Blum R, Cislighi B, Costenbader E, Harper C, Heise L, et al. Proposing a Conceptual Framework to Address Social Norms That Influence Adolescent Sexual and Reproductive Health. *Journal of Adolescent Health*. 2019;64(4):7–9.

34. Lawrence JM, Divers J, Isom S, Saydah S, Imperatore G, Pihoker C, et al. Trends in Prevalence of Type 1 and Type 2 Diabetes in Children and Adolescents in the US, 2001-2017. *JAMA*. 2021;326(8):717-27.
35. Dabelea D, Mayer-Davis EJ, Saydah S, et al. Prevalence of type 1 and type 2 diabetes among children and adolescents from 2001 to 2009. *JAMA*. 2014;311(17):1778–86.
36. Kementerian Kesehatan Republik Indonesia. *Survei kesehatan dasar nasional*. Jakarta: Kementerian Kesehatan Republik Indonesia. 2013.
37. Tanamas S.K., Reddy S.P., Chambers M.A., Clark E.J., Dunnigan D.L., Hanson R.L., et al. Effect of severe obesity in childhood and adolescence on risk of type 2 diabetes in youth and early adulthood in an American Indian population. *Pediatr. Diabetes*. 2017.
38. Shaw N.D., Seminara S.B., Welt C.K., et al. Expanding the phenotype and genotype of female GnRH deficiency. *J. Clin. Endocrinol. Metab*. 2011;96(3):566–76.
39. González N., Moreno-Villegas Z., González-Bris A., Egido J., Lorenzo Ó. Regulation of visceral and epicardial adipose tissue for preventing cardiovascular injuries associated to obesity and diabetes. *Cardiovasc. Diabetol*. 2017;16(1):44.
40. lint A., Arslanian S. Treatment of type 2 diabetes in youth. *Diabetes Care*. 2011;34:177–83.
41. Goran M.I., Gower B.A. Longitudinal study on pubertal insulin resistance. *Diabetes*. 2001;50(11):2444–50.
42. Nadal A., Alonso-Magdalena P., Soriano S., Quesada I., Ropero A.B. The pancreatic beta-cell as a target of estrogens and xenoestrogens: Implications for blood glucose homeostasis and diabetes. *Mol. Cell. Endocrinol*. 2009;304(1-2):63–8.
43. Beck J., Brandt E.N., Jr, Blackett P., Copeland K. Prevention and early detection of type 2 diabetes in children and adolescents. *J. Okla. State Med. Assoc*. 2001;94(8):355–61.

44. Jiang X., Ma H., Wang Y., Liu Y. Early life factors and type 2 diabetes mellitus. *J. Diabetes Res.* 2013;2013.
45. Tanamas S.K., Reddy S.P., Chambers M.A., Clark E.J., Dunnigan D.L., Hanson R.L., et al. Effect of severe obesity in childhood and adolescence on risk of type 2 diabetes in youth and early adulthood in an American Indian population. *Pediatr. Diabetes.* 2017.
46. Franks P.W., Pearson E., Florez J.C. Gene-environment and gene-treatment interactions in type 2 diabetes: progress, pitfalls, and prospects. *Diabetes Care.* 2013;36(5):1413–21.
47. DeFronzo RA. Banting Lecture. From the triumvirate to the ominous octet: a new paradigm for the treatment of type 2 diabetes mellitus. *Diabetes.* 2009. 58: 773–95.
48. Petersen MC, Sulman GI. Mechanism of Insulin Action and Insulin Resistance. *Physiol Rev.* 2018. 98(4): 2133-223.
49. Hotamisligil GS. Inflammation and metabolic disorders. *Nature.* 2006;444: 860–7.
50. Perkeni. *Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia.* Jakarta: PB Perkeni ; 2021.
51. Panuganti N. Obesity [Internet]. 2022 [cited 2022 Okt 25]. <https://pubmed.ncbi.nlm.nih.gov/29083734/Redinger> Professor R. The Pathophysiology of Obesity and
52. Raitakari OT, Junala M, Rönnemaa T, Keltikkangas-Järvinen L, Räsänen L, Pietikäinen M, dkk. Profil kohort: risiko kardiovaskular di Young Finns Study. *Epidemiol Int J.* 2008; 37 :1220–6.
53. Redinger Professor R. The Pathophysiology of Obesity and Its Clinical Manifestations. Vol. 3. *Gastroenterology & Hepatology.* 2007.
54. Hamilton MT, Healy GN, Dunstan DW, Zderic TW, Owen N. Too Little Exercise and Too Much Sitting: Inactivity Physiology and the Need for New Recommendations on Sedentary Behavior. *Current cardiovascular risk reports.* 2008. 2(4):292–8.

55. Cruz ML, Weigensberg MJ, Huang TT, Ball G, Shaibi GQ, Goran MI. Sindrom metabolik pada pemuda Hispanik yang kelebihan berat badan dan peran sensitivitas insulin. *J Clin Endocrinol Metab.* 2004; 89 :108–13.
56. Ferrannini E, Natali A, Capaldo B, Lehtovirta M, Jacob S, Yki-Järvinen H. Resistensi insulin, hiperinsulinemia, dan tekanan darah: peran usia dan obesitas. *Grup Eropa untuk Studi Resistensi Insulin (EGIR) Hipertensi.* 1997; 30 :1144–9.
57. American Diabetes Association Anak dan remaja: standar perawatan medis pada diabetes 2018. *Perawatan Diabetes.* 2018; 41:126–36.
58. Craig ME, Jefferies C, Dabelea D, Balde N, Seth A, Donaghue KC, dkk. Pedoman konsensus praktik klinis ISPAD 2014. Definisi, epidemiologi, dan klasifikasi diabetes pada anak dan remaja. *Diabetes Anak.* 2014; 15(20) :4–17.
59. Copeland KC, Silverstein J, Moore KR, Prazar GE, Raymer T, Shiffman RN, dkk. Penatalaksanaan Diabetes Mellitus tipe 2 (T2DM) yang baru terdiagnosis pada anak dan remaja. *Pediatri.* 2013;131:364–82.
60. Kelompok Kerja Endokrinologi. Perhimpunan Dokter Anak Indonesia. *Diagnosis dan pengobatan diabetes mellitus tipe 2.* Jakarta: Perhimpunan Dokter Anak Indonesia. 2018.
61. Robertson K, Riddell MC, Guinhouya BC, Adolfsson P, Hanas R, International Society for Pediatric and Adolescent Diabetes pedoman konsensus praktik klinis ISPAD 2014. Latihan pada anak-anak dan remaja dengan diabetes. *Diabetes Anak.* 2014;15(20):203–23.
62. Deng C. Efek obat antipsikotik pada nafsu makan, berat badan, dan resistensi insulin. *Endocrinol Metab Clin North Am.* 2013;42:545–63.
63. Hanas R, John WG, International HbA1c Consensus Committee 2013 Pembaruan tentang standardisasi pengukuran hemoglobin A1c di seluruh dunia. *Diabetes Anak.* 2014;15.
64. Delamater AM, de Wit M, McDarby V, Malik J, Acerini CL. Perawatan psikologis anak-anak dan remaja dengan diabetes tipe 1. *Diabetes Anak.* 2014; 15(20):232–44.

65. Ashraff S, Siddiqui MA, Carline TE. Obesity and Insulin Resistance: Management in Diabetes. *Turkish J Endocrinol Metab.* 2013;17(3):57–62.
66. Kershaw EE, Flier JS. Adipose Tissue as an Endocrine Organ. *J Clin Endocrinol Metab.* 2004;89(6):2548–56.
67. Jo J, Gavrilova O, Pack S, Jou W, Mullen S, Sumner AE, et al. Hypertrophy and/or Hyperplasia: Dynamics of Adipose Tissue Growth. *PLOS Comput Biol.* 2009;5(3).
68. Virtue S, Vidal-Puig A. Adipose Tissue Expandability, Lipotoxicity and The Metabolic Syndrome - An Allostatic Perspective. *Biochim Biophys Acta - Mol Cell Biol Lipids.* 2010:338–49.
69. Item F, Konrad D. Visceral Fat and Metabolic Inflammation: The Portal Theory Revisited. *Obes Rev.* 2012;13(2):30–9.
70. Tchernof A, Després JP. Pathophysiology of Human Visceral Obesity: An Update. *Physiol Rev.* 2013;93(1):359–404.
71. Marette BA. Molecular Mechanism of Insulin Resistance in Obesity. *Off J Int Chair Cardiometabolic Risk.* 2008;1(1):5–9.
72. Munn Z, Aromataris E, Tufanaru C, et al. The Development of software to support multiple systematic review types: The Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI). *Int J Evid Based Healthc.* 2019;17(1): 36-43.
73. Ahmed B, Sultana R, Greene MW. Adipose tissue and insulin resistance in obese. *Biomed Pharmacother.* 2021.
74. Xu H, Verre MC. Type 2 Diabetes Mellitus in Children. *Am Fam Physician.* 2018; 98(9):590-4.
75. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ.* 2021; 372-471.
76. Peraturan Dekan FK Unand. Pedoman umum penulisan studi literatur. 2020.
77. Kim JY, Bacha F, Tfayli H, Michaliszyn SF, Yousuf S, Arslanian S. Adipose Tissue Insulin Resistance in Youth on the Spectrum From Normal Weight to

- Obese and From Normal Glucose Tolerance to Impaired Glucose Tolerance to Type 2 Diabetes. *Diabetes Care*. 2019;42(2):265-272.
78. Cree-Green M, Wiromrat P, Stuppy JJ, Thurston J, Bergman BC, Baumgartner AD, *et al*. Muscle Insulin Resistance in Youth with Obesity and Normoglycemia is Associated with Altered Fat Metabolism. *Obesity (Silver Spring)*. 2019;27(12):2046-2054.
79. Müllner E, Röhnisch HE, von Brömssen C, Moazzami AA. Metabolomics analysis reveals altered metabolites in lean compared with obese adolescents and additional metabolic shifts associated with hyperinsulinaemia and insulin resistance in obese adolescents: a cross-sectional study. *Metabolomics*. 2021;17(1):11.
80. Pimentel JL, Vander Wyst KB, Soltero EG, Peña A, Hu HH, Bailey SS, *et al*. Organ fat in Latino youth at risk for type 2 diabetes. *Pediatr Diabetes*. 2022;23(3):286-290.
81. Cynthia AS, Nandakrishna B, Ajit S, Sudha V, Avinash H. Childhood and Adolescent Onset Type 2 Diabetes Mellitus (CAT2DM): The yoke of The Young Diabetics. *Clinical Epidemiology and Global Health*. 2022; 16.
82. Carlos AN, Elza DM. Correlation of Body Mass Index Z-scores with Glucose and Lipid Profiles Among Overweight and Obese Children and Adolescents. *Jornal de Pediatria*. 2018; 94 (3); 308-312.
83. Silvana NF, Ney CA, Crésio AD, Patricia S, Almeida M, Carlos RB, *et al*. Glucose Alteration and Insulin Resistance in Asymptomatic Obese Children And Adolescents. *Jornal de Pediatria (Versão em Português)*. 2018; 94(3); 268-272.
84. Hagman E, Besor O, Hershkop K, Santoro N, Pierpont B, Mata M, *et al*. Relation of The Degree of Obesity in Childhood to Adipose Tissue Insulin Resistance. *Acta Diabetol*. 2019;56(2):219-226.
85. Galderisi A, Polidori D, Weiss R, Giannini C, Pierpont B, Tricò D, *et al*. Lower Insulin Clearance Parallels a Reduced Insulin Sensitivity in Obese Youths and

Is Associated With a Decline in β -Cell Function Over Time. *Diabetes*. 2019;68(11):2074-2084.

86. Chung ST, Katz LEL, Stettler-Davis N, Shults J, Sherman A, Ha J, *et al*. The Relationship Between Lipoproteins and Insulin Sensitivity in Youth With Obesity and Abnormal Glucose Tolerance. *J Clin Endocrinol Metab*. 2022;107(6):1541-1551.
87. LaBarre JL, Hirschfeld E, Soni T, Kachman M, Wigginton J, Duren W, *et al*. Comparing the Fasting and Random-Fed Metabolome Response to an Oral Glucose Tolerance Test in Children and Adolescents: Implications of Sex, Obesity, and Insulin Resistance. *Nutrients*. 2021;13(10):3365.
88. Kostopoulou E, Tikka M, Rojas Gil AP, Partsalaki I, Spiliotis BE. Glucose Tolerance and Insulin Sensitivity Markers in Children and Adolescents with Excess Weight. *Eur Rev Med Pharmacol Sci*. 2021; 19: 5986-5992
89. Lestari, Zulkarnain, Aisyah S. Diabetes Melitus: Review Etiologi, Patofisiologi, Gejala, Penyebab, Cara Pemeriksaan, Cara Pengobatan, dan Cara Pencegahan. *Journal UIN Alauddin*. 2021; 237-241



