

Diabetes eUpdate – April 2025



Figure 1 NHS Lanarkshire Logo

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1. Ahmed N, Zavala GA, Siddiqui F, et al. [A randomised controlled feasibility trial of Behavioural activation as a treatment for people with diabetes and depression: \(DiaDeM feasibility trial\)](#). *J Affect Disord*. 2025; 372: no pagination.
2. Al Hayek A, Al Dawish MA. [Technology for the Management of Type 1 Diabetes Mellitus in Saudi Arabia and MENA Region: A Systematic Review](#). *Curr Diabetes Rev*. 2025; 21(6): 75-92.
3. Andrade CAS, Lovas S, Mahrouseh N, et al. [Primary Prevention of Type 2 Diabetes Mellitus in the European Union: A Systematic Review of Interventional Studies](#). *Nutrients*. 2025; 17(6): no pagination
4. Apperloo EM, Tuttle KR, Pavo I, et al. [Tirzepatide Associated With Reduced Albuminuria in Participants With Type 2 Diabetes: Pooled Post Hoc Analysis From the Randomized](#)

- [Active- and Placebo-Controlled SURPASS-1-5 Clinical Trials](#). *Diabetes Care*. 2025; 48(3): 430-436.
5. Asante E, Carter G, McAneney H, Bam V, Sarfo-Kantanka O, Prue G. [Nurse-Led Mobile Phone Intervention to Promote Self-Management in Type 2 Diabetes in Ghana: A Randomized Controlled Trial](#). *Sci Diabetes Self Manag Care*. 2025; 51(1): 85-99.
 6. Bandarian F, Qorbani M, Nasli-Esfahani E, Sanjari M, Rambod C, Larijani B. [Epidemiology of Diabetes Foot Amputation and its Risk Factors in the Middle East Region: A Systematic Review and Meta-Analysis](#). *Int. j. low. extrem. wounds*. 2025; 24(1): 31-40.
 7. Bogaert L, Dirinck E, Calders P, et al. [Explanatory variables of objectively measured physical activity, sedentary behaviour and sleep in adults with type 1 diabetes: A systematic review](#). *Diabet Med*. 2025; 42(3): e15473.
 8. Cheng Z, Xiao Q, Xu Y, et al. [Effectiveness of patient-centred care in self-management of type 2 diabetes: a systematic review and meta-analysis](#). *BMC Health Serv Res*. 2025; 25(1): 613.
 9. Choe A, Fredericks EM, Albright D, et al. [Executive Functioning, Diabetes Distress, and Diabetes Management Among Adolescents With Type 1 Diabetes: Youth and Parent Perspectives](#). *Pediatr Diabetes*. 2025; 7036544.
 10. de Almeida JA, Batalha APDB, Santos CVO, Fontoura TS, Laterza MC, da Silva LP. [Acute effect of aerobic and resistance exercise on glycemia in individuals with type 2 diabetes: Systematic review and meta-analysis](#). *Braz J Phys Ther*. 2025; 29(1): 101146.
 11. de Vries ST, Pena MJ, Tye SC, et al. [Sex differences in the efficacy of angiotensin receptor blockers on kidney and cardiovascular outcomes among individuals with type 2 diabetes and diabetic kidney disease: post hoc analyses of the RENAAL and IDNT trials](#). *Diabetologia*. 2025; 68(3): 507-515.
 12. Dutta D, Kamrul-Hasan ABM, Surana V, et al. [Efficacy and safety of the glucagon receptor antagonist volagidemab in type-1 diabetes: A systematic review and meta-analysis](#). *Ann N Y Acad Sci*. 2025; 1543(1): 94-101.
 13. Fabricius EE, Bergholt T, Kelstrup L, Jango H. [Gestational Diabetes Mellitus Affects the Risk of Obstetric Anal Sphincter Injury: A Systematic Review and Meta-Analysis of Cohort Studies](#). *Int Urogynecol J Pelvic Floor Dysfunct*. 2025; 36(1): 25-34.

14. Feng YJ, Deng Z, Sivak A, Yeung RO, Nagpal T. [Women's perspectives to improve prenatal care for gestational diabetes: A systematic review and meta-aggregation of qualitative studies](#). *Acta Obstet Gynecol Scand*. 2025; 104(2): 267-287.
15. Galderisi A, Sims EK, Evans-Molina C, et al. [Trajectory of beta cell function and insulin clearance in stage 2 type 1 diabetes: natural history and response to teplizumab](#). *Diabetologia*. 2025; 68(3): 646-661.
16. Garcia-Martos JM, Valverde-Bolivar FJ, Campillo-Lopez MT, Delgado-Rodriguez M. [Association between periodontal disease and gestational diabetes: Systematic review and meta-analysis](#). *Prim Care Diabetes*. 2025; 19(1): 1-6.
17. Gebert ZM, Kwiecinski J, Weir-McCall JR, et al. [Impact of diabetes mellitus on coronary artery plaque characteristics and outcomes in the SCOT-HEART trial](#). *J Cardiovasc Comput Tomogr*. 2025; 19(2): 208-214.
18. Giosue A, Skantze V, Hjorth T, et al. [Association of the glucose patterns after a single nonstandardized meal with the habitual diet composition and features of the daily glucose profile in individuals without diabetes](#). *Am J Clin Nutr*. 2025; 121(2): 246-255.
19. Golubic R, Mumbole H, Ismail MH, et al. [Glucocorticoid treatment and new-onset hyperglycaemia and diabetes in people living with chronic obstructive pulmonary disease: A systematic review and meta-analysis](#). *Diabet Med*. 2025; 42(3): e15475.
20. Guo Z, Huang L, Jiang Z, Bai X, Wang Z, Huang H. [Effects of different hypoglycaemic drugs on beta-cell function in type 2 diabetes mellitus: a systematic review and network meta-analysis](#). *Eur J Med Res*. 2025; 30(1): 121.
21. Gupta J, Abosaoda MK, Shukla M, et al. [Effect of soluble fiber supplementation on lipid parameters in subjects with type 2 diabetes: A systematic review and meta-analysis of randomized controlled trials](#). *Prostaglandins Other Lipid Mediat*. 2025; 176: no pagination
22. Habibi A, Letafatkar N, Sattari N, et al. [Modulation of inflammatory markers in type 2 diabetes mellitus through gut microbiome-targeted interventions: An umbrella review on meta-analyses](#). *Clin Nutr ESPEN*. 2025; 65: 93-104.
23. Haile KE, Asgedom YS, Azeze GA, Amsalu AA, Gebrekidan AY, Kassie GA. [Diabetic foot: A systematic review and meta-analysis on its prevalence and associated factors among patients with diabetes mellitus in a sub-Saharan Africa](#). *Diabetes Res Clin Pract*. 2025; 220: 111975.

24. Hennekes MHCL, Haugvik S, de Wit M, et al. [Diabetes Body Project: Acute Effects of an Eating Disorder Prevention Program for Young Women With Type 1 Diabetes. A Multinational Randomized Controlled Trial](#). *Diabetes Care*. 2025; 48(2): 220-225.
25. Hirsch IB, Beck RW, Marak MC, et al. [A Randomized Trial Comparing Inhaled Insulin Plus Basal Insulin Versus Usual Care in Adults With Type 1 Diabetes](#). *Diabetes Care*. 2025; 48(3): 353-360.
26. Ho MTH, Chan JKN, Chiu WCY, et al. [Risk of mortality and complications in patients with severe mental illness and co-occurring diabetes mellitus: A systematic review and meta-analysis](#). *Eur Neuropsychopharmacol*. 2025; 91: 25-36.
27. Huang S, Zeng X, Deng S, He S, Liu F. [Prevalence of xerostomia in patients with type 2 diabetes mellitus: a systematic review and meta-analysis](#). *BMC Oral Health*. 2025; 25(1): 662.
28. Kamarullah W, Pranata R, Wiramihardja S, Tiksnadi BB. [Role of Incretin Mimetics in Cardiovascular Outcomes and Other Classical Cardiovascular Risk Factors beyond Obesity and Diabetes Mellitus in Nondiabetic Adults with Obesity: a Meta-analysis of Randomized Controlled Trials](#). *Am J Cardiovasc Drugs*. . 2025;25(2):203-229.
29. Khokhar PB, Gravino C, Palomba F. [Advances in artificial intelligence for diabetes prediction: insights from a systematic literature review](#). *Artif Intell Med*. 2025; 164: 103132.
30. Kristensen DK, Mose FH, Buus NH, et al. [SGLT2 inhibition improves endothelium-independent vasodilatory function in type 2 diabetes: A double-blind, randomized, placebo-controlled crossover trial](#). *Diabetes Obes Metab*. 2025; 27(3): 1123-1131.
31. Kumie G, Nigatie M, Alamrew A, et al. [Prevalence of microvascular complications and associated factors among diabetes mellitus patients in Ethiopia: Systematic review and meta-analysis](#). *Microvasc Res*. 2025; 158: 104779.
32. Laesser CI, Piazza C, Schorno N, et al. [Simplified meal announcement study \(SMASH\) using hybrid closed-loop insulin delivery in youth and young adults with type 1 diabetes: a randomised controlled two-centre crossover trial](#). *Diabetologia*. 2025; 68(2): 295-307.
33. Lai ST, Styles SE, Boucsein A, et al. [Parental perspectives following the implementation of advanced hybrid closed-loop therapy in children and adolescents with type 1 diabetes and elevated glycaemia](#). *Diabet Med*. 2025; 42(3): e15448.

34. Larsen R, Taylor F, Dempsey PC, et al. [Effect of Interrupting Prolonged Sitting with Frequent Activity Breaks on Postprandial Glycemia and Insulin Sensitivity in Adults with Type 1 Diabetes on Continuous Subcutaneous Insulin Infusion Therapy: A Randomized Crossover Pilot Trial](#). *Diabetes Technol Ther*. 2025; 27(2): 101-112.
35. Li X, Chen B, Liu X, Ma J. [Effects of exercise on cognitive function and glycated hemoglobin A1c among patients with type 2 diabetes mellitus and cognitive impairment: A systematic review and meta-analysis](#). *Geriatr Gerontol Int*. 2025; 25(2): 148-159.
36. Lingvay I, Asbjornsdottir B, Kristensen NR, Laugesen C, Vianna A, Knop FK. [Pharmacokinetic/Pharmacodynamic Modeling of Efficacy and Hypoglycemia Rate When Switching From Once-Daily Basal Insulin to Once-Weekly Insulin Icodec Without or With a One-Time Additional Dose in Insulin-Experienced Individuals With Type 2 Diabetes](#). *Endocr Pract*. 2025; 31(2): 147-151.
37. Lokesh MN, Kumar R, Jacob N, et al. [Supplementation of High-Strength Oral Probiotics Improves Immune Regulation and Preserves Beta Cells among Children with New-Onset Type 1 Diabetes Mellitus: A Randomised, Double-Blind Placebo Control Trial](#). *Indian J Pediatr*. 2025; 92(3): 277-283.
38. Lou YR, Xu YL, Xiong Y, Deng C, Wang Q. [Population Pharmacokinetics of Efsabaglute Alfa in Healthy Subjects and Subjects with Type 2 Diabetes](#). *Clin Pharmacokinet*. 2025; 64(4): 533-552.
39. Maddaloni E, Nguyen M, Shah SH, Holman RR. [Osteoprotegerin, Osteopontin, and Osteocalcin Are Associated With Cardiovascular Events in Type 2 Diabetes: Insights From EXSCEL](#). *Diabetes Care*. 2025; 48(2): 235-242.
40. Mathews R, Chu Y. [An encompassing review of meta-analyses and systematic reviews of the effect of oats on all-cause mortality, cardiovascular risk, diabetes risk, body weight/adiposity and gut health](#). *Crit Rev Food Sci Nutr*. 2025; 65(13): 2587-2608.
41. Moiz A, Filion KB, Toutounchi H, et al. [Efficacy and Safety of Glucagon-Like Peptide-1 Receptor Agonists for Weight Loss Among Adults Without Diabetes : A Systematic Review of Randomized Controlled Trials](#). *Ann Intern Med*. 2025; 178(2): 199-217.
42. Molveau J, Myette-Cote E, Guedet C, et al. [Impact of pre- and post-exercise strategies on hypoglycemic risk for two modalities of aerobic exercise among adults and adolescents living with type 1 diabetes using continuous subcutaneous insulin infusion: A randomized controlled trial](#). *Diabetes Metab*. 2025; 51(1): 101599.

43. Moreira AM, Rados DV, de Farias CB, et al. [Effects of nurse tele support via telephone calls on transition between specialized and primary care in type 2 diabetes mellitus patients: a CONSORT-compliant randomized clinical trial](#). *Endocrine*. 2025; 87(3): 978-986.
44. Movahed F, Heidari E, Sadeghi D, et al. [Incident diabetes in adolescents using antidepressant: a systematic review and meta-analysis](#). *Eur Child Adolesc Psychiatry*. 2025; 34(2): 599-610.
45. Moura FA, Kamanu FK, Wiviott SD, et al. [Type 2 diabetes genetic risk and incident diabetes across diabetes risk enhancers](#). *Diabetes Obes Metab*. 2025; 27(3): 1287-1295.
46. Nadeau KJ, Arslanian SA, Bacha F, et al. [Insulin clearance at randomisation and in response to treatment in youth with type 2 diabetes: a secondary analysis of the TODAY randomised clinical trial](#). *Diabetologia*. 2025; 68(3): 676-687.
47. Nelson AJ, Kaltenbach LA, McGuire DK, et al. [Discontinuation of SGLT-2i and GLP-1RA among persons with Type 2 diabetes and atherosclerotic cardiovascular disease treated in US cardiology clinics](#). *Am Heart J*. 2025; 282: 51-57.
48. Niwaha AJ, Shields BM, Rodgers LR, et al. [The impact of prolonged walking on fasting plasma glucose in type 2 diabetes: A randomised controlled crossover study](#). *Diabet Med*. 2025; 42(3): e15468.
49. Ohkuma T, Harris K, Woodward M, et al. [Intensive Glucose Lowering and Its Effects on Vascular Events and Death According to Age at Diagnosis and Duration of Diabetes: The ADVANCE Trial](#). *Diabetes Care*. 2025; 48(2): 279-284.
50. Pabla P, Mallinson J, Nixon A, et al. [Effect of medium-chain triglycerides and whey protein isolate preloads on glycaemia in type 2 diabetes: a randomized crossover study](#). *Am J Clin Nutr*. 2025; 121(2): 232-245.
51. Patel KV, Chunawala Z, Verma S, et al. [Intensive Lifestyle Intervention, Cardiac Biomarkers, and Cardiovascular Outcomes in Diabetes: Look AHEAD Cardiac Biomarker Ancillary Study](#). *J Am Coll Cardiol*. 2025; 85(5): 489-500.
52. Philis-Tsimikas A, Fortmann AL, Clark T, et al. [Dulce Digital-Me: results of a randomized comparative trial of static versus adaptive digital interventions for Latine adults with diabetes](#). *Ann Behav Med*. 2025; 59(1): no pagination.

53. Plotnikoff RC, Murphy M, Wilczynska M, et al. [Efficacy of a Multicomponent Physical Activity Intervention for Teachers With or At Risk of Type 2 Diabetes: The Support, Motivation, and Physical Activity Research for Teachers Health Randomized Controlled Trial](#). *J Phys Act Health*. 2025; 22(3): 334-346.
54. Putranata H, Hengky A, Hartoko B. [Unraveling the role of muscle mass and strength in predicting type 2 diabetes risk: a systematic review](#). *Acta Diabetol*. 2025; 62(2): 157-176.
55. Rademaker D, de Wit L, Duijnhoven RG, et al. [Oral Glucose-Lowering Agents vs Insulin for Gestational Diabetes: A Randomized Clinical Trial](#). *JAMA*. 2025; 333(6): 470-478.
56. Roddy MK, Spieker AJ, Greevy RA Jr, Nelson LA, Berg C, Mayberry LS. [Diabetes-specific family functioning typology associated with intervention engagement and effects: secondary analyses from a randomized controlled trial](#). *Ann Behav Med*. 2025; 59(1): no pagination.
57. Sharifi A, Hwang PH, Kouhi A, Zojaji M, Ghaffari ME, Ghaedsharaf S. [Role of Early Postoperative Measurement of Copeptin in Prediction of Diabetes Insipidus Following Pituitary Surgery in Adults: A Systematic Review Plus Meta-analysis](#). *World Neurosurg*. 2025; 193: 46-53.
58. Singh H, Kaur S, Kaushal P, Sharma J, Singla M. [Risk of new onset diabetes mellitus with pitavastatin as compared to atorvastatin and rosuvastatin: a systematic review and meta-analysis](#). *Expert Rev Clin Pharmacol*. 2024; 17(12): 1173-1181.
59. Smeijer JD, de Vries ST, Kohan DE, Hou FF, Heerspink HJL. [Sex differences in response to the endothelin receptor antagonist atrasentan in individuals with type 2 diabetes and chronic kidney disease: a post hoc analysis of the SONAR trial](#). *Diabetologia*. 2025; 68(3): 516-525.
60. Sohn M, Park YH, Lim S. [Effects of choline alfoscerate on cognitive function and quality of life in type 2 diabetes: A double-blind, randomized, placebo-controlled trial](#). *Diabetes Obes Metab*. 2025; 27(3): 1350-1358.
61. Ssemmondo E, Shah N, Newham M, et al. [Effect of introduction of intermittently scanned continuous glucose monitoring on glycaemic control in individuals living with type 2 diabetes mellitus treated with non-insulin therapies-A randomised controlled trial](#). *Diabetes Obes Metab*. 2025; 27(3): 1226-1232.

62. Stice E, Rohde P, Desjardins CD, Gee K, Shaw H, Kim S. [A preliminary randomized trial of a brief dissonance-based type 2 diabetes prevention programme for adults with pre-diabetes](#). *Diabetes Obes Metab*. 2025; 27(3): 1572-1579.
63. Su Y, Liu X, Jiang B, et al. [Potato Intake and the Risk of Overweight/Obesity, Hypertension, Diabetes, and Cardiovascular Disease: A Systematic Review and Meta-analysis of Observational Studies](#). *Nutr Rev*. 2025; 83(3): 466-478.
64. Takahashi A, Nomoto H, Yokoyama H, et al. [Efficacy of imeglimin treatment versus metformin dose escalation on glycemic control in subjects with type 2 diabetes treated with a dipeptidyl peptidase-4 inhibitor plus low-dose metformin: A multicenter, prospective, randomized, open-label, parallel-group comparison study \(MEGMI study\)](#). *Diabetes Obes Metab*. 2025; 27(3): 1466-1476.
65. Thomsen MN, Skytte MJ, Samkani A, et al. [Replacing dietary carbohydrate with protein and fat improves lipoprotein subclass profile and liver fat in type 2 diabetes independent of body weight: evidence from 2 randomized controlled trials](#). *Am J Clin Nutr*. 2025; 121(2): 224-231.
66. Tonga E, Worboys H, Evans RA, et al. [Physical activity guidelines for adults with type 2 Diabetes: Systematic review](#). *Diabetes Res Clin Pract*. 2025; 220: 111982.
67. Trawley S, Kwon HJ, Vogrin S, et al. [Automated Insulin Delivery Effects During Driving Among Older Adults with Type 1 Diabetes in a Randomized Trial](#). *Diabetes Technol Ther*. 2025; 27(2): 134-138.
68. Uhm JY, Kim S. [School nurses' competency in supporting students with type 1 diabetes: A mixed methods systematic review](#). *Nurse Educ Today*. 2025; 146: no pagination.
69. Wang H, Ge L, Yan Yan Kwok J, Zhang Z, Wiley J, Guo J. [A blended mindfulness-based stress reduction program to improve diabetes self-management among people with type 2 diabetes mellitus: a mediation effect analysis](#). *Ann Behav Med*. 2025;59(1): no pagination.
70. Wang X, Pei J, Zheng K, Liu M, Hu X. [The effect of HbA1c variability on the efficacy of intensive blood pressure control in patients with type 2 diabetes](#). *Diabetes Obes Metab*. 2025; 27(3): 1208-1216.
71. Wang Y, Wen Q, Lu Y, Yang J, Huang N, Chen W. [Identifying subgroups benefiting from intensive glycaemic treatment to improve renal outcomes in type 2 diabetes: Insights from the ACCORD trial](#). *Diabetes Obes Metab*. 2025; 27(3): 1198-1207.

72. Whelehan G, Dirks ML, West S, et al. [High-protein vegan and omnivorous diets improve peripheral insulin sensitivity to a similar extent in people with type 2 diabetes](#). *Diabetes Obes Metab*. 2025; 27(3): 1143-1152.
73. Wong WJ, Nguyen TV, Ahmad F, et al. [Hypertension in Adults With Diabetes in Southeast Asia: A Systematic Review](#). *J Clin Hypertens (Greenwich)*. 2025; 27(1): e14936.
74. Xu L, Wu Y, Li J, et al. [Efficacy and safety of 11 sodium-glucose cotransporter-2 inhibitors at different dosages in type 2 diabetes mellitus patients inadequately controlled with metformin: a Bayesian network meta-analysis](#). *BMJ Open*. 2025; 15(2): e088687.
75. Yadav A, Kumar R, Dayal D, Yadav J, Pattanaik S, Patil A. [Effect of Postmeal Fast-Acting Insulin Aspart Injection on the Frequency of Hypoglycemia among Pre-School Children with Type 1 Diabetes: An Open-Label, Cross-Over, Randomized Control Trial](#). *Indian J Pediatr*. 2025; 92(3): 235-242.
76. Yang Z, Tan Z, Sun M, Zhang J, Hou H, Li X. [Positive impact of mobile educational platforms on blood glucose control in patients with nephrotic syndrome and steroid-induced diabetes mellitus: a randomized controlled study](#). *BMC Endocr Disord*. 2025; 25(1): 118.
77. Zhai Y, Gou H, Sun X. [The Association Between Gestational Age and Type 1 Diabetes Mellitus in Children and Adolescents: A Systematic Review and Network Meta-Analysis](#). *Paediatr Perinat Epidemiol*. 2025; 39(2): 220-229.
78. Zhao Q, Cooke A, Aurizki G, Dowding D. [Women's experiences and needs in the use of digital technologies for the management of gestational diabetes: An integrative systematic review](#). *Midwifery*. 2025; 141: no pagination.
79. Zhao X, Xu X, Wang S, et al. [Heterogeneous blood pressure treatment effects on cognitive decline in type 2 diabetes: A machine learning analysis of a randomized clinical trial](#). *Diabetes Obes Metab*. 2025; 27(3): 1432-1443.
80. Zhyzhneuskaya SV, Al-Mrabeh AH, Peters C, et al. [Clinical utility of liver function tests for resolution of metabolic dysfunction-associated steatotic liver disease after weight loss in the Diabetes Remission Clinical Trial](#). *Diabet Med*. 2025; 42(3): e15462.

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