

# Diabetes eUpdate – June 2025



Figure 1 NHS Lanarkshire Logo

## Contents

Diabetes	1
End of Document	9

## Diabetes

1. Al-hussein F, Abdollahian Laleh Tafakori M, Khalid Al-Shali. [A hybrid approach to enhance HbA1c prediction accuracy while minimizing the number of associated predictors: A case-control study in Saudi Arabia](#). *PLoS One*. 2025; 20(6): no pagination.
2. Allahkhah MS, Movassaghghazani M. [Assessment and Risk Analysis of Nitrosamines in Sausages From Northern Iran](#). *Food Science & Nutrition*. 2025; 13(6): 11.
3. Altaseb BK, Addis AH, Melese SA, et al. [Prevalence of vision impairment among patients with diabetes mellitus in sub-Saharan Africa: A systematic review and meta-analysis](#). *PLoS One*. 2025; 20(6) no pagination.
4. Anand S, Aggarwal D, Zaidi S, et al. [Estimation of cervicocephalic kinesthetic perception and its correlation with fall risk in adults with diabetes and without](#)

[diabetes experiencing cervical pain: A comparative study.](#) *PLoS One.* 2025; 20(6): no pagination.

5. Azmat F et al. [Role of functional foods in diabetes management.](#) *Nutrire.* 2025; 50(1): 1.
6. Bae JH, Min JL, Kim SH, et al. [Fatty liver index and risk of type 2 diabetes of adults with normoglycemia: Insights into insulin sensitivity and beta-cell function.](#) *PLoS One.* 2025; 20(6): no pagination..
7. Bahrami M, Ahrari S, Mirshahi A, Asl MS, Esmaeelzadeh M. [Investigating the Relationship Between Type D Personality Characteristics and Self-Efficacy in Coronary Artery Disease Patients With Type A Personality: A Cross-Sectional Descriptive Study.](#) *Health Science Reports.* 2025; 8(6): 8.
8. Barbara PO, St fani SB, Santos dC MG, Cristina CK. [Estimation of the future prevalence of diabetes based on data from the Brazilian Study of Cardiovascular Risk Factors in Adolescents \(ERICA\).](#) *PLoS One.* 2025; 20(6): no pagination.
9. Bhagra S, Ducharme-Smith A, Juntunen MB, et al. [Diabetes rescue, engagement, and management \(D-REM\) for hypoglycemia: Clinical trial protocol of a community paramedic program to improve diabetes management among adults with severe hypoglycemia.](#) *PLoS One.* 2025; 20(6): no pagination.
10. Bo dys A, Bu dak  , Nicze M, Okopie  B. [Liraglutide Reduces Liver Steatosis and Improves Metabolic Indices in Obese Patients Without Diabetes: A 3-Month Prospective Study.](#) *International Journal of Molecular Sciences.* 2025; 26(12): 5883.
11. Bonyani A, Lin TK, Jakira A, et al. [Economic assessment of potential changes to essential medicines for diabetes in Uganda.](#) *PLoS One.* 2025; 20(6): no pagination.
12. Bu mann A, Speckemeier C, Ehm A, Kollar B, Anja Neumann SN. [Approaches to predict future type 2 diabetes mellitus and chronic kidney disease: A scoping review.](#) *PLoS One.* 2025; 20(6): no pagination.
13. Cao S et al. [Elevated Serum SERPINE2 Levels are Linked to Impaired Renal Function in Patients with Type 2 Diabetes Mellitus.](#) *Diabetes Therapy.* 2025; 16(6): 1313 1326.
14. Carazo A, Pacl kov  M, Fadraersada J, et al. [Type 1 diabetes mellitus patients had lower total vitamin K levels and increased sensitivity to direct anticoagulants.](#) *PLoS One.* 2025; 20(6): no pagination.
15. Cellic Z et al. [Type 2 diabetes risk among master swimmers: a case control study.](#) *Nutrire.* 2025; 50(1): 5.
16. Cheng-Wei Li A, Yang-Chi L, Jing-Yang H, Lung-Ching C, Su-Kiat Chua. [Superior cardiovascular protection with GLP-1 RAs over SGLT2 inhibitors in DM and HFpEF: A propensity score matching study.](#) *PLoS One.* 2025; 20(6): no pagination..

17. Chiu M-C et al. [Flexible and objective diagnosis of type II diabetes by using a fuzzy deep learning ensemble approach](#). *Complex & Intelligent Systems*. 2025; 11(6): 268.
18. Daya KM, Shaikh N, Tolani H, et al. [Burden of micronutrient deficiency among patients with type 2 diabetes: systematic review and meta-analysis](#). *BMJ Nutrition, Prevention & Health*. 2025; 8(1): 334–344.
19. Dong-Yun L, Ju-Hyun L, Jong-Ju S, Seung-Jun O, Ha-Cheol Sung. [Estimating nesting habitat characteristics for the Kentish plover \(\*Anarhynchus alexandrinus\*\) with the effect of substrate and vegetation using a Bayesian network approach](#). *PLoS One*. 2025; 20(6): no pagination.
20. Elrherabi A, Nasr FA, Farihi A, et al. [Therapeutic Potential of \*Lavandula stoechas\* Aqueous Extract in Managing Diabetes and Its Complications: Insights From Biochemical and In Silico Studies](#). *Food Science & Nutrition*. 2025; 13(6): 13.
21. Fadini G P et al. [Preferences, Expectations and Attitudes on Basal Insulin from Patient–Physician–Payer Perspective: A Multi-stakeholder Survey by the Italian Diabetes Society \(ITA4P Study\)](#). *Diabetes Therapy*. 2025; 16(6): 1241–1254.
22. Fayomi SI, Erukainure OL, Zimbili Msomi N. [The Essentiality of Amino Acids in Healthiness and Disease State: Type II Diabetes as a Case Study](#). *Food Science & Nutrition*. 2025; 13(6): 20.
23. Fouad D, Elnagar DM, Eid G, Shuker E. [Hepatoprotective activity of raspberry ketone against streptozotocin-induced type 2 diabetes in male rats](#). *PLoS One*. 2025; 20(6): no pagination.
24. Geravand F, Nasli-Esfahani E, Montazer M, Jalalzadeh M, Azadbakht L. [The association between the quality and quantity of carbohydrate intake and the size, depth, and Wagner grade of diabetic foot ulcers in patients with type 2 diabetes](#). *PLoS One*. 2025; 20(6): no pagination.
25. Girişgen İ, Altıncık SA, Avcı E, et al. [Could MOTS-c Levels in Children with Type 1 Diabetes Mellitus Be an Indicator for Early Diabetic Kidney Disease?](#). *Journal of Clinical Research in Pediatric Endocrinology*. 2025; 17(2): 168–175.
26. Hillick D et al. [Increased risk of admission to neonatal intensive care unit in neonates born to mothers with pregestational diabetes](#). *Eur J Pediatr*. 2025; 184(6): 354.
27. Hughes EM, Kiedrowski MR. [Effects of Elevated Glucose on Bacterial Respiratory Infections in Cystic Fibrosis and Chronic Airway Diseases](#). *International Journal of Molecular Sciences*. 2025; 26(12): 5597.
28. Hwa JY, Kim E, Kim YH, Gyu-Na L, Han K, Lee JH. [A link between smoking behaviors and the risk of hidradenitis suppurativa in diabetic patients](#). *PLoS One*. 2025; 20(6): no pagination.

29. İnalkaç N, Kamer K, Polat F, Keleş İ. [Impact of Adherence to Guideline-Directed Prevention Strategies on Clinical Outcomes in Patients With Coronary Artery Disease and Diabetes Mellitus Following Acute Coronary Syndrome: A 3-Year Cohort Study.](#) *Clin Cardiol.* 2025; 48(6): 13.
30. Jarab AS, Al-Qerem W, Alqudah S, et al. [Insulin-self administration among individuals with diabetes: Implications for improved practices](#). *PLoS One.* 2025; 20(6): no pagination.
31. Kamruzzaman M, Horowitz M, Rahman MS, Deshmukh H, Jones KL, Marathe CS. [Glycemic control is worse in rural compared to urban type 2 diabetes in Bangladesh, irrespective of food security status](#). *Journal of Diabetes Investigation.* 2025; 16(6): 1112–1118.
32. Kasuga Y, Miyakoshi K, Yokoyama M, et al. [Analysis of the Japanese gestational diabetes mellitus diagnostic strategy during the coronavirus disease 2019 pandemic using DREAMBee study data](#). *Journal of Diabetes Investigation.* 2025; 16(6): 1119–1125.
33. Kaya S et al. [Macular perfusion alterations in people with recent-onset diabetes and novel diabetes subtypes](#). *Diabetologia.* 2025; 68(6): 1140–1156.
34. Khwankaew N, Srisovanna N, Pruksanusak N. [Assessing the reliability of abdominal adiposity measurements by transabdominal ultrasound in first trimester pregnancies with sonographers of varying experience levels](#). *PLoS One.* 2025; 20(6): no pagination.
35. Kim M, Song YM, Yoon KJ, et al. [Effects of DA-9701 \(motilitone®\) on gastric emptying, glycemic control, and oxidative stress in diabetic rats](#). *PLoS One.* 2025; 20(6): no pagination.
36. Kumagai-Braesch M, Yao M, Ågren N, Karadagi A, Bo-Göran Ericzon, Domogatskaya A. [Monolayer whole adherent islets: A novel tool for studying drug-induced diabetic phenotypes in vitro](#). *PLoS One.* 2025; 20(6): no pagination.
37. Kuroda H, Yeung SLA, Fujii R, Iwagami M, Goto A. [Investigating the non-linear association between sleep duration and type 2 diabetes: conventional and Mendelian randomization analyses from the UK Biobank](#). *Journal of Diabetes Investigation.* 2025; 16(6): 1126–1137.
38. Laiho J E et al. [Detection of enterovirus RNA in pancreas and lymphoid tissues of organ donors with type 1 diabetes](#). *Diabetologia.* 2025; 68(6): 1211–1225.
39. Law L, Heerey JJ, Devlin BL, et al. [Effect of anti-inflammatory diets on health-related quality of life in adults with chronic disease: a systematic review and meta-analysis](#). *BMJ Nutrition, Prevention & Health.* 2025: no pagination.

40. Lee H et al. [Exploring the shared genetic landscape of diabetes and cardiovascular disease: findings and future implications](#). *Diabetologia*. 2025; 68(6): 1087–1100.
41. Lee-Ling L, Jones S, Cikomola JC, Hivert MF, Misra S. [Understanding the drivers and consequences of early-onset type 2 diabetes](#). *The Lancet*. 2025; 405(10497): 2327–2340.
42. Lin T, Liang T, Shen Y, Gao F. [BACE1 Inhibition Protects Against Type 2 Diabetes Mellitus by Restoring Insulin Receptor in Mice](#). *International Journal of Molecular Sciences*. 2025; 26(11): 5100.
43. Liu X, Luan F, Xiao L, Cao Y. [Mediating role of grip strength between depression symptoms and cognitive function: A cross-sectional study among older adults with diabetes in rural areas](#). *PLoS One*. 2025; 20(6): no pagination.
44. Lohr AM, Kim SW, St. Sauver J, et al. [Exploring factors impacting Hispanic/Latinx individuals' response to a type 2 diabetes digital storytelling intervention](#). *PLoS One*. 2025; 20(6): no pagination.
45. Lotfy M, Khalaf A, AlBarghouthy F, et al. [Effects of Conocarpus lancifolius and crocin on superoxide dismutase and protein kinase B genes and protein expressions in diabetic rats](#). *PLoS One*. 2025; 20(6): no pagination.
46. Ma M, Hu J, Hao Y, et al. [Whole Brain Monosynaptic Input of Distinct Neurons in the Globus Pallidus Externa](#). *CNS Neuroscience & Therapeutics*. 2025; 31(6): 19.
47. Martín-Ávila J, Rodríguez-Jiménez E, Valero-Moreno S, Gil-Gómez J, Montoya-Castilla I, Pérez-Marín M. [Intervention through an intelligent technological platform for socio-emotional development and health promotion in adolescents with Type 1 Diabetes Mellitus \(emoTICare\): A study protocol for randomized controlled trial](#). *PLoS One*. 2025; 20(6): no pagination.
48. Mitri R, El-Ali Z. [Dietary knowledge and practices among patients with diabetes in North Lebanon: the role of dietary counselling](#). *Journal of Nutritional Science*. 2025; 14: no pagination.
49. Mohamed YM, Mancera J, Brandenberg A, Stefan Fischli M, Havranek MM. [Personalized machine learning models for noninvasive hypoglycemia detection in people with type 1 diabetes using a smartwatch: Insights into feature importance during waking and sleeping times](#). *PLoS One*. 2025; 20(6): no pagination.
50. Monika P, Leszek S. [Severe Insulin Resistance Syndromes: Clinical Spectrum and Management](#). *International Journal of Molecular Sciences*. 2025; 26(12): 5669.
51. Mushiga Y, Nagai N, Ozawa Y. [Associations between serum lipid levels and the macular retinal volumes in patients with diabetes](#). *PLoS One*. 2025; 20(6): no pagination.

52. Neubauer-Geryk J, Myśliwiec M, Katarzyna Z, Leszek B. [The Relationship Between Cholesterol Level, Cytokine Profile, and Arterial Stiffness in Young Patients with Uncomplicated Type 1 Diabetes](#). *International Journal of Molecular Sciences*. 2025; 26(12): 5513.
53. Ni Y, Zhang Y, Jiang M. [The causal relationship between gestational diabetes mellitus and postpartum depression: A Mendelian randomization study](#). *Journal of Diabetes Investigation*. 2025; 16(6): 1138–1140.
54. Nøkleby K, Jenum AK, Esben SB, et al. [Effects on HbA1c of referral of type 2 diabetes patients to secondary care](#). *Scand J Prim Health Care*. 2025; 43(2): 313–323.
55. Nosratabadi M. [Explaining the Self-Care Behaviors in Type 2 Diabetic Patients Based on Adverse Childhood Experiences, Subjective Socioeconomic Status, and Mindfulness in Isfahan, Iran](#). *Health Science Reports*. 2025; 8(6): 10.
56. Onori M, Beneduce G, Colella F, Lucchetti D, Policola C, et al. [Placental inflammation is increased in gestational diabetes mellitus: The role of inflammasome NLRP-3 and chemokine scavenger decoy receptor D6](#). *PLoS One*. 2025; 20(6): no pagination.
57. ÖÖ B, Akgül EA, Yanar N, et al. [The Effect of Parental Collaboration on Diabetes Self-efficacy, Quality of Life and HbA1c Level in Adolescents Diagnosed with Type 1 Diabetes](#). *Journal of Clinical Research in Pediatric Endocrinology*. 2025; 17(2): 176–184.
58. Osumili B et al. [Efficacy and Safety of Tirzepatide Compared with GLP-1 RAs in Patients with Type 2 Diabetes Treated with Basal Insulin: A Network Meta-analysis](#). *Diabetes Therapy*. 2025; 16(6): 1279–1311.
59. Özdemir Şahan Y, Büyükyılmaz G, Doğan O, Boyraz M, Çetin İl, Ece İ. [Evaluation of Arrhythmia Risk in Children with Type 1 Diabetes Mellitus](#). *Journal of Clinical Research in Pediatric Endocrinology*. 2025; 17(2): 146–152.
60. Perejón López D, Medrano Duarte NM, Orós Ruiz M, SV Júlia, Gascó Serna I. [Subtypes of hypertension and their association to comorbidities and ethnicity in pregnant women](#). *PLoS One*. 2025; 20(6): no pagination.
61. Plattner C, Pfeifer B, Sourij H, et al. [Effects of family history and sex on diabetes-related outcome in type 2 diabetes – Analysis from the Tyrolean diabetes registry](#). *PLoS One*. 2025; 20(6): no pagination.
62. Ramana KV. [Special Issue “Molecular Therapeutics for Diabetes and Related Complications”](#). *International Journal of Molecular Sciences*. 2025; 26(12): 5585.
63. Satta E et al. [Urinary L-FABP: A Novel Biomarker for Evaluating Diabetic Nephropathy Onset and Progression. A Narrative Review](#). *Diabetes Therapy*. 2025; 16(6): 1107–1124.

64. Şenol HB, Şalbaş ÖY, Kadem EN, et al. [Single sural nerve response: A reliable and practical method for diagnosis of diabetic peripheral neuropathy in children with type 1 diabetes](#). *Journal of Diabetes Investigation*. 2025; 16(6): 1050–1054.
65. Shengjie Z, Wang X, Chen Z, Zhang Y, Jianzheng Z, Qiang T. [Correlation between sarcopenia-related traits and type 2 diabetes mellitus](#). *Chin Med J*. 2025; 138(11): 1381–1383.
66. Shengnan H, Li F, Dedi X, et al. [Mechanism of Ginsenosides in the Treatment of Diabetes Mellitus Based on Network Pharmacology and Molecular Docking](#). *International Journal of Molecular Sciences*. 2025; 26(11): 5300.
67. Sjöholm Å, Bennet L, Nilsson PM. [Cognitive dysfunction in diabetes – the ‘forgotten’ diabetes complication: a narrative review](#). *Scand J Prim Health Care*. 2025; 43(2): 448–454.
68. Sriphrapradang C, Thakkinstian A, Chinthammit R, Nayak G. [Characterization of treatment intensified \(add-on to metformin\) adults with type 2 diabetes in Thailand: A cross-sectional real-world study \(CONVERGE\)](#). *Journal of Diabetes Investigation*. 2025; 16(6): 1010–1019.
69. Suleiman N, Ahmad I, Yuasa M. [Protocol for a QUALICOPC study in a Malaysian setting: Primary care pharmacy services system performance and T2DM older adults' quality of life evaluation](#). *PLoS One*. 2025; 20(6): no pagination.
70. Sung K, Lee S. [Social determinants of health and type 2 diabetes in Asia](#). *Journal of Diabetes Investigation*. 2025; 16(6): 971–983.
71. Tariq A, Sayed Alireza MZ, Ehsanianzavieh M, Sabouri A, Sevrin AK. [Pedalling towards better health: a randomised controlled trial of aerobic cycling to improve glycaemic control and quality of life in middle-aged men with type 2 diabetes](#). *BMJ Nutrition, Prevention & Health*. 2025: no pagination.
72. Ting-Ju Kuo, Shih-Wei H, Hui-Wen L. [Additive effect of diabetes mellitus on the prevalence and prognosis of sarcopenic obesity: Implications for all-cause mortality](#). *PLoS One*. 2025; 20(6): no pagination.
73. Unknown authors. [The underlying black hole phase transitions in an Einstein-Maxwell-dilaton model with a holographic critical point](#). *Journal of High Energy Physics*. 2025; 2025(6): 142.
74. Volcansek S et al. [Amylin: From Mode of Action to Future Clinical Potential in Diabetes and Obesity](#). *Diabetes Therapy*. 2025; 16(6): 1207–1227.
75. Wan-Hua Z, Zhang Z. [Application of IRSA-BP neural network in diagnosing diabetes](#). *PLoS One*. 2025; 20(6): no pagination.

76. Wilson A et al. [Narrative Review: Continuous Glucose Monitoring \(CGM\) in Older Adults with Diabetes](#). *Diabetes Therapy*. 2025; 16(6): 1139–1154.
77. Wu L, Tsang V, Clifton-Bligh R, et al. [Hyperglycemia in patients treated with immune checkpoint inhibitors: key clinical challenges and multidisciplinary consensus recommendations](#). *Journal for Immunotherapy of Cancer*. 2025; 13(6): no pagination..
78. Wu Y, Gao Y, Guo X, Zhang J, Li A. [Effectiveness of finerenone in Chinese patients with type 2 diabetes mellitus and chronic kidney disease with microalbuminuria: A retrospective real-world study](#). *Journal of Diabetes Investigation*. 2025; 16(6): 1028–1033.
79. Xu M, Xing S, Zhang X, Jiang Y, Chen Y. [Potential risk factors associated with diabetic mellitus in patients with febrile upper urinary tract calculi with infection](#). *PLoS One*. 2025; 20(6): no pagination.
80. Yang D, Yin R, Zhang X, Wang X, Pei X, Guo Z, et al. [Circulating exosome-circRNAs mediated downregulation of FGF9 through ceRNA mechanism aggravates renal fibrosis in diabetic nephropathy](#). *PLoS One*. 2025; 20(6): no pagination.
81. Yildirim D, Aras D. [Evaluation of Complications, Peripheral Neuropathic Pain, and Sleep Quality in Patients With Diabetes Mellitus](#). *Brain and Behavior*. 2025; 15(6): 7.
82. Yu-Cheng C, Wei-Chang H, Yu-Hsuan L, Shin-Shin L, Sheu Meei-Ling, I-Te L. [Circulating Aryl Hydrocarbon Receptor Is Associated with Latent Tuberculosis Infection in Patients with Type 2 Diabetes](#). *International Journal of Molecular Sciences*. 2025; 26(11): 5384.
83. Zhang H, Qingyi J, Peige S, et al. [Incidence, prevalence, and burden of type 2 diabetes in China: Trend and projection from 1990 to 2050](#). *Chin Med J*. 2025; 138(12): 1447–1455.
84. Zhang X, Huo L, Yuan N, et al. [Association between the ferritin level and risk of gestational diabetes mellitus: A prospective cohort study](#). *PLoS One*. 2025; 20(6): no pagination.
85. Zhang Z, Chen H, Chen L, et al. [Blood pressure and the risk of diabetes: A longitudinal observational study based on Chinese individuals](#). *Journal of Diabetes Investigation*. 2025; 16(6): 1081–1090.
86. Zhao H, Li R, Guo X, Kang J, Li H, et al. [Mechanism of Plantamajoside in inhibiting ferroptosis of pancreatic  \$\beta\$  cells and treatment of T2DM via activation of the xCT/GPX4 pathway](#). *PLoS One*. 2025; 20(6): no pagination.

End of Document