

Guía de Carolina del Norte Para La Prevención y El Manejo de La Diabetes **3.^a Edición**



Cómo Se Desarrolló Esta Guía



MANEJE EL PESO | VIVA LIBRE DE TABACO | PARTICIPE EN PROGRAMAS DE CAMBIO DE ESTILO DE VIDA
PARTICIPE EN EDUCACIÓN SOBRE LA DIABETES | PARTICIPE EN PLAN DE TRATAMIENTO | DUERMA LO SUFICIENTE



Cómo Se Desarrolló Esta Guía

Consejo Asesor de Diabetes de Carolina del Norte

El **Consejo Asesor de Diabetes de Carolina del Norte (DAC)** se creó en 1988 como grupo asesor de la División de Salud Pública del Departamento de Salud y Servicios Humanos de Carolina del Norte (NCDHHS). Cuando se estableció el DAC, existían más de 300 conjuntos diferentes de guías clínicas estandarizadas para el manejo de la diabetes. En 1996, la Asociación Americana de la Diabetes publicó su primer suplemento, que organizaba todos los estándares y recomendaciones clínicas actuales para el cuidado y manejo de la diabetes, las declaraciones de postura y consenso, así como los Estándares Nacionales para el Automanejo de la Diabetes (DSME), en un solo número de *Diabetes Care*, llamado Suplemento,¹³² que se publica en enero. El DAC recibió estos y desarrolló un conjunto uniforme de guías clínicas para pacientes y proveedores que se distribuyeron por todo el estado. El DAC trabajó con el personal de la División de Salud Pública para crear un currículo de educación para el automanejo de la diabetes antes del desarrollo de currículos de educación formal por parte de la Asociación Americana de Educadores en Diabetes (actualmente Asociación de Especialistas en Cuidado y Educación de la Diabetes) o la Asociación Americana de la Diabetes.



North Carolina Diabetes Advisory Council

El DAC fue fundamental para garantizar que Carolina del Norte promulgara una ley que obligara a las compañías de seguros a cubrir los medicamentos, suministros y educación para la diabetes. Gracias a la labor del DAC y los legisladores, Carolina del Norte fue uno de los primeros estados en aprobar una ley para proteger a los escolares con diabetes. El DAC sirve como recurso profesional para la División de Salud Pública del Departamento de Salud y Servicios Humanos de Carolina del Norte (NCDHHS). La membresía está compuesta por profesionales de la salud, proveedores, líderes comunitarios y empresariales, personas con diabetes, grupos de apoyo, coaliciones, partes interesadas, socios, etc., todos comprometidos con la reducción de la carga de la diabetes en Carolina del Norte. El consejo del grupo está dirigido por un presidente y un vicepresidente que representan los aspectos clínicos, de investigación y comunitarios de la prevención y el manejo de la diabetes. Está integrado por un coordinador que trabaja para la División de Salud Pública. El grupo se reúne presencialmente (o virtualmente, según las limitaciones) tres veces al año, y el presidente, el vicepresidente y el coordinador se reúnen mensualmente para planificar actividades y llevar a cabo tareas. El reglamento también permite reuniones de comités ad hoc según sea necesario. Las tres reuniones anuales del consejo del DAC incluyen temas relevantes para la prevención y el manejo de la diabetes, que se describen en esta Guía.

Proceso de Desarrollo de la Guía

La Guía de Carolina del Norte para la Prevención y el Manejo de la Diabetes, Tercera Edición, se desarrolló a partir de la exitosa creación de las *Guías de 2020 y 2015-2020*. Las versiones anteriores se basaron en el *Plan Estratégico de Diabetes de Carolina del Norte* (2011-2012), el *Plan Estatal Coordinado de Prevención de Enfermedades Crónicas y Lesiones de Carolina del Norte* (2013) y el *Plan de Acción Legislativo contra la Diabetes de Carolina del Norte* (2015), así como en la colaboración con representantes del Centro para la Innovación en Derecho y Políticas de Salud del Centro de Innovación en Políticas Públicas de la Facultad de Derecho de Harvard, el Fondo Benéfico Kate B. Reynolds y los Centros para el Control y la Prevención de Enfermedades.

Esta tercera edición se ha editado para incluir los datos más recientes y las prácticas basadas en la evidencia relacionadas con la mejora de las disparidades en salud, la equidad en salud y los determinantes sociales de la salud. La evidencia sigue siendo contundente: los determinantes sociales son un factor clave en el aumento de las disparidades raciales y étnicas en la diabetes, tanto en nuestro estado como en todo el país. El equipo también consideró importante incorporar información sobre medicamentos seleccionados disponibles para el tratamiento y el manejo de la diabetes. La *Guía* está en consonancia con otras guías estatales con misiones como la del NC DAC, incluyendo las desarrolladas por Eat Smart Move More NC y el Grupo de Trabajo Justus-Warren para la Prevención de Enfermedades Cardíacas y Accidentes Cerebrovasculares.

Para la tercera edición de la *Guía*, los miembros del Comité de Resúmenes del NC DAC, junto con **Chris Memering**, MSN, RN, CDCES, FADCES, presidente del NC DAC, y **Joanne Rinker**, MS, RD, CDCES, LDN, FADCES, vicepresidenta del NC DAC, desarrollaron el proceso de actualización y el enfoque de las revisiones del documento. El equipo contó con el apoyo de **Claudia Giraldo**, MPH, y **Corissa Payton**, MA, CHES, ACSM-EP, de la División de Conexiones Comunitarias y Clínicas para la Prevención y la Salud del Departamento de Salud y Servicios Humanos de Carolina del Norte.



Editores Colaboradores (en orden alfabético)

Michael Canos, MD, FACE, FACP, MPH, MSc, Profesor Asociado de Medicina, Endocrinología, Metabolismo y Nutrición, Especialista en Diabetes y Metabolismo, Endocrinólogo, Duke Health

Marico Dove, PharmD, Farmacista, Advance Community Health

Claudia S Giraldo,* MPH, Asistente de Diabetes, División de Salud Pública, Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Departamento de Salud y Servicios Humanos de Carolina del Norte

Susan Houston,* DNP, AGNP-C, CDCES, Clínica de Medicina del Estilo de Vida y Salud ECU

Wanda Lakey, MD, MHS, FACP, Profesor Asociado de Medicina, División de Endocrinología, Centro Médico de la Universidad de Duke/Centro Médico de Asuntos de Veteranos de Durham, Presidente de la Junta de Revisión Institucional, Sistema de Salud de la Universidad de Dukem

Huabin Luo, PhD, Profesor Asociado en la Universidad de Carolina del Este, Facultad de Medicina Brody, Departamento de Salud Pública

Kim McDonald, MD, MPH, Jefe de Sección/ Consultor Médico, División de Salud Pública, Sección de Enfermedades Crónicas y Lesiones

Alexis Monks, MS, ACSM-CEP, Exercise Fisiólogo del Ejercicio, Duke Health and Fitness Center

Tanya Munger, DNP, FNP-BC, Enfermera practicante de endocrinología, Duke Endocrinology

Corissa Payton,* MA, CHES, ACSM-EP, DSMES Coordinador de Calidad, División de Salud Pública, Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Departamento de Salud y Servicios Humanos de Carolina del Norte

Joanne Rinker,* MS RDN, CDCES, LDN, FADCES, Director de Práctica y Desarrollo de Contenido en la Asociación de Especialistas en Atención y Educación de la Diabetes

Carmen D. Samuel-Hodge,* PhD, MS, RD, LDN, Profesor Asociado, Escuela Gillings de Salud Pública Global y Facultad de Medicina, Departamento de Nutrición, Centro para la Promoción de la Salud y la Prevención de Enfermedades

Tish Singletary,* MA, Jefe de División, División de Salud Pública, Conexiones Clínicas y Comunitarias para la Prevención y la Salud, Departamento de Salud y Servicios Humanos de Carolina del Norte

Susan E. Spratt,* MD, Profesor de Medicina, División de Endocrinología, Metabolismo y Nutrición, Director Médico Sénior; Duke Population Health Management, Director de Servicios de Diabetes

*DAC Abstract Committee Member

A partir de la primavera de 2024, los miembros del Comité Asesor del NC DAC participaron en una serie de reuniones virtuales dirigidas por el equipo de apoyo para debatir la investigación y las políticas de inclusión de contenido. A cada miembro se le asignaron secciones según su experiencia con la Guía 2020, con la tarea de garantizar que se utilizara la evidencia más reciente para fundamentar la estructura y el contenido de la Tercera Edición.

Tras varias rondas adicionales de revisión por parte de los miembros del equipo de redacción, los revisores externos aportaron sus comentarios, que fueron incorporados a la Guía por el personal de apoyo principal y los revisores finales. Revisores incluidos (en orden alfabético)

Claudia Giraldo, MPH, Oficina de Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Sección de CDI, División de Salud Pública

Kim McDonald, MD, MPH, Jefa de Sección / Consultora Médica, Sección de Enfermedades Crónicas y Lesiones (CDI), División de Salud Pública

Corissa Payton, MA, CHES, ACSM-EP, Oficina de Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Sección de CDI, División de Salud Pública

Sharon Rhyne, MHA, MBA, Division Office, Division of Public Health, North Carolina Department of Health and Human Services at Chapel Hill

Tish Singletary, MA, Oficina de Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Sección de CDI, División de Salud Pública

Susan Spratt, MD, Departamento de Medicina de la Universidad de Duke, División de Endocrinología, Metabolismo y Nutrición

Cindy Stevenson, Oficina de Conexiones Comunitarias y Clínicas para la Prevención y la Salud, Sección de CDI, División de Salud Pública

Sheree Thaxton Vodicka, MA, North Carolina Alliance of YMCAs

La Tercera Edición de la *Guía* se finalizó en noviembre de 2024. La *Guía* estará disponible en el sitio web de **Diabetes Carolina del Norte**.

Apéndice: Sitios Web para la Prevención y el Manejo de la Diabetes

Estos sitios web están disponibles para quienes desean prevenir y manejar la diabetes.
Esta lista no es exhaustiva.

Asociación de Especialistas en Atención y Educación sobre la Diabetes

diabeteseducator.org

Asociación Americana de la Diabetes

diabetes.org

CDC Diabetes

cdc.gov/diabetes

CDC Programa de Reconocimiento de la Prevención de la Diabetes

cdc.gov/diabetes-prevention/lifestyle-change-program

Diabetes en el Trabajo

diabetes.org/advocacy/know-your-rights/your-rights-on-the-job

Coalición de Apoyo al Paciente con Diabetes

diabetespac.org

Hermanas de la Diabetes

diabetessisters.org

Fundación para la Investigación de la Diabetes Juvenil

jdrf.org

Programa Nacional de Educación sobre la Diabetes

ndep.nih.gov

Programa Nacional de Prevención de la Diabetes

cdc.gov/diabetes-prevention

Instituto Nacional de Diabetes y Enfermedades Digestivas y Renales

niddk.nih.gov

NCDHHS – División de Salud Pública

diabetesnc.com

diabetesfreennc.com

diabetesmanagementnc.com

Asociaciones para la asistencia con recetas

pparx.org

Tomando el control de su diabetes (TCOYD)

tcoyd.org

Referencias

1. Explore diabetes in North Carolina | AHR. America's Health Rankings. Published 2022. Accessed April 21, 2024. <https://www.americahealthrankings.org/explore/measures/Diabetes/NC>
2. The burden of diabetes in North Carolina. American Diabetes Association. Published March 2023. Accessed April 21, 2024. https://diabetes.org/sites/default/files/2023-09/ADV_2023_State_Fact_sheets_all_rev_North_Carolina.pdf
3. Centers for Disease Control and Prevention. Stats of the states—diabetes mortality. CDC.gov. Published April 29, 2022. Accessed April 21, 2024. https://www.cdc.gov/nchs/pressroom/sosmap/diabetes_mortality/diabetes.htm
4. Agency For Toxic Substances and Disease Registry. Models and frameworks for the practice of community engagement. CDC.gov. Published June 25, 2015. Accessed April 21, 2024. https://www.atsdr.cdc.gov/communityengagement/pce_models.html
5. Golden SD, McLeroy KR, Green LW, Earp JAL, Lieberman LD. Upending the Social Ecological Model to guide health promotion efforts toward policy and environmental change. *Health Education & Behavior*. 2015;42(1_suppl):8S14S. doi:<https://doi.org/10.1177/1090198115575098>
6. Dickinson JK, Guzman SJ, Maryniuk MD, et al. The use of language in diabetes care and education. *Diabetes Care*. 2017;40(12):1790-1799. doi:<https://doi.org/10.2337/dci17-0041>
7. American Diabetes Association. Understanding diabetes diagnosis. diabetes.org. Published 2023. Accessed April 21, 2024. <https://diabetes.org/about-diabetes/diagnosis>
8. CDC. The surprising truth about prediabetes. Diabetes. Published May 21, 2024. Accessed April 21, 2024. <https://www.cdc.gov/diabetes/prevention-type-2/truth-about-prediabetes.html#:~:text=Prediabetes%20is%20a%20big%20deal>
9. CDC. National diabetes statistics report. Diabetes. Published May 15, 2024. Accessed August 31, 2024. <https://www.cdc.gov/diabetes/php/data-research/index.html>
10. Boyko EJ, Seelig AD, Ahroni JH. Limb- and person-level risk factors for lower-limb amputation in the prospective Seattle diabetic foot study. *Diabetes Care*. 2018;41(4):891-898. doi:<https://doi.org/10.2337/dc17-2210>
11. Lawal Y, Bello F, Kaoje YS. Prediabetes deserves more attention: A review. *Clinical Diabetes*. 2020;38(4):cd190101. doi:<https://doi.org/10.2337/cd19-0101>
12. Deshpande AD, Harris-Hayes M, Schootman M. Epidemiology of diabetes and diabetes-related complications. *Physical Therapy*. 2018;88(11):1254-1264. Accessed April 21, 2024. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3870323/>
13. Giovannucci E, Harlan DM, Archer MC, et al. Diabetes and cancer: A consensus report. *Diabetes Care*. 2010;33(7):1674-1685. doi:<https://doi.org/10.2337/dc10-0666>
14. American Diabetes Association. Classification and diagnosis of diabetes: Standards of Medical Care in Diabetes—2022. *Diabetes Care*. 2022;45(Supplement_1):S17-S38. doi:<https://doi.org/10.2337/dc22-s002>
15. American Diabetes Association. Statistics about diabetes. diabetes.org. Published 2023. Accessed April 23, 2024. <https://diabetes.org/about-diabetes/statistics/about-diabetes>
16. Herold KC, Bundy BN, Long SA, et al. An Anti-CD3 Antibody, Teplizumab, in relatives at risk for type 1 diabetes. *New England Journal of Medicine*. 2019;381(7):603-613. doi:<https://doi.org/10.1056/nejmoa1902226>
17. CDC. QuickStats: Percentage of mothers with gestational diabetes, by maternal age — national vital statistics system, United States, 2016 and 2021. *MMWR Morbidity and Mortality Weekly Report*. 2023;72(1). doi:<https://doi.org/10.15585/mmwr.mm7201a4>
18. U.S. Department of Health and Human Services. Diabetes and Pregnancy Gestational Diabetes. Centers for Disease Control and Prevention. Accessed August 31, 2024. https://www.cdc.gov/pregnancy/documents/shared-bd/Diabetes_and_Pregnancy508.pdf
19. ElSayed NA, Grazia Aleppo, Bannuru RR, et al. 15. Management of Diabetes in Pregnancy: *Standards of Care in Diabetes—2024*. *Diabetes Care*. 2023;47(Supplement_1):S282-S294. doi:<https://doi.org/10.2337/dc24-s015>
20. D'Amico R, Dalmacy D, Akinduro JA, et al. Patterns of postpartum primary care follow-up and diabetes-related care after diagnosis of gestational diabetes. *JAMA Network Open*. 2023;6(2):e2254765. doi:<https://doi.org/10.1001/jamanetworkopen.2022.54765>
21. CDC. About type 2 diabetes. Diabetes. Published 2024. Accessed August 23, 2024. <https://www.cdc.gov/diabetes/about/about-type-2-diabetes.html>
22. ElSayed NA, Grazia Aleppo, Bannuru RR, et al. 2. Diagnosis and classification of diabetes: *Standards of Care in Diabetes—2024*. *Diabetes Care*. 2024;47(Supplement_1):S20-S42. doi:<https://doi.org/10.2337/dc24-s002>
23. BRFSS 2018 - North Carolina: Survey results. Prediabetes. NC State Center for Health Statistics. Published August 16, 2019. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2018/nc/all/prediab.html>
24. CDC. Diabetes basics. Diabetes. Published May 16, 2024. Accessed August 23, 2024. <https://www.cdc.gov/diabetes/about/index.html#:~:text=With%20prediabetes%2C%20blood%20sugar%20levels>
25. CDC. Prediabetes: Could it be you? Diabetes. Published May 22, 2024. Accessed August 23, 2024. <https://www.cdc.gov/diabetes/communication-resources/prediabetes-statistics.html>
26. Divers J, Mayer-Davis EJ, Lawrence JM, et al. Trends in incidence of type 1 and type 2 diabetes among youths — Selected counties and Indian Reservations, United States, 2002–2015. *MMWR Morbidity and Mortality Weekly Report*. 2020;69(6):161-165. doi:<https://doi.org/10.15585/mmwr.mm6906a3>
27. Harding JL, Pavkov ME, Gregg EW, Burrows NR. Trends of nontraumatic lower-extremity amputation in end-stage renal disease and diabetes: United States, 2000–2015. *Diabetes Care*. 2019;42(8):1430-1435. doi:<https://doi.org/10.2337/dc19-0296>
28. BRFSS 2012 - North Carolina: Survey results. Diabetes-African Americans. NC State Center for Health Statistics. Published August 6, 2013. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2012/nc/afam/DIABETE3.html>
29. North Carolina resident population health data by race and ethnicity. NC State Center for Health Statistics. Published 2019. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/schs/pdf/NCPopHealthDatabyRaceEthOct2019v2.pdf>
30. Leading causes of death, North Carolina residents, 2012. *NC State Center for Health Statistics*. Published online December 2013. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/vital/lcd/2012/pdf/TblsA-F.pdf>
31. North Carolina Department of Health and Human Services, Office of Minority Health and Health Disparities. Racial and ethnic health disparities in North Carolina. Published April 2018. Accessed March 26, 2024. <https://digital.ncdcr.gov/documents/detail/4910361?item=5547323>
32. QuickStats: Percentage of adults aged ≥18 years with diagnosed diabetes, by urbanization level and age group — National health interview survey, United States, 2022. *MMWR Morbidity and Mortality Weekly Report*. 2024;73. doi:<https://doi.org/10.15585/mmwr.mm7302a5>

33. 2019 BRFSS survey results: Piedmont North Carolina diabetes. NC State Center for Health Statistics. Published September 9, 2020. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2019/pied/DIABETE4.html>
34. 2019 BRFSS survey results: Eastern North Carolina diabetes. NC State Center for Health Statistics. Published September 9, 2020. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2019/east/DIABETE4.html>
35. 2019 BRFSS survey results: Western North Carolina diabetes. NC State Center for Health Statistics. Published September 9, 2020. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2021/west/DIABETE4.html>
36. 2018 BRFSS survey results: Piedmont North Carolina** Chronic health conditions. NC State Center for Health Statistics. Published August 16, 2019. Accessed March 26, 2024. <https://schs.dph.ncdhhs.gov/data/brfss/2018/pied/DIABETE3.html>
37. Barker L, et al. Geographic distribution of diagnosed diabetes in the U.S.: a diabetes belt. *American Journal of Preventive Medicine*. Volume 40, Issue 4, 434 - 439. Published April 2011. Accessed March 26, 2024. doi.org/10.1016/j.amepre.2010.12.019
38. Norton JM, Moxey-Mims MM, Eggers PW, et al. Social determinants of racial disparities in CKD. *Journal of the American Society of Nephrology*. 2016;27(9):2576-2595. doi:<https://doi.org/10.1681/ASN.2016010027>
39. Casagrande SS, Park J, Herman WH, Bullard KM. Health insurance and diabetes. PubMed. Published December 20, 2023. Accessed March 26, 2024. <https://www.ncbi.nlm.nih.gov/books/NBK597725/>
40. American Diabetes Association. New American Diabetes Association report finds annual costs of diabetes to be \$412.9 Billion | ADA. diabetes.org. Published November 1, 2023. Accessed March 28, 2024. <https://diabetes.org/newsroom/press-releases/new-american-diabetes-association-report-finds-annual-costs-diabetes-be>
41. American Diabetes Association. Economic costs of diabetes in the U.S. in 2017. *Diabetes Care*. 2018;41(5):917-928. doi:<https://doi.org/10.2337/dci18-0007>
42. Rubens M, Ramamoorthy V, Saxena A, McGranaghan P, McCormack-Granja E. Recent trends in diabetes-associated hospitalizations in the United States. *Journal of Clinical Medicine*. 2022;11(22):6636. doi:<https://doi.org/10.3390/jcm11226636>
43. American Diabetes Association. Diabetes care in the hospital: Standards of medical care in diabetes—2022. *Diabetes Care*. 2021;45(Supplement_1):S244-S253. doi:<https://doi.org/10.2337/dc22-s016>
44. Diabetesity: How obesity is related to diabetes. Published online November 8, 2021. Accessed April 21, 2024. <https://health.clevelandclinic.org/diabetesity-the-connection-between-obesity-and-diabetes>
45. American Diabetes Association. Obesity and weight management for the prevention and treatment of type 2 diabetes: Standards of Care in Diabetes-2024. *Diabetes Care*. Published online January 1, 2024;47(Suppl 1):S145-S157. doi:<https://doi.org/10.2337/dc24-S008>.
46. American Diabetes Association Professional Practice Committee. 5. Facilitating positive health behaviors and well-being to improve health outcomes: Standards of Care in Diabetes-2024. *Diabetes Care*. 2024;47(Suppl 1):S77-S110:S48-S65. doi:<https://doi.org/10.2337/dc24-e04>
47. Evert AB, Dennison M, Gardner CD, et al. Nutrition therapy for adults with diabetes or prediabetes: A consensus report. *Diabetes Care*. 2019;42(5):731-754. doi:<https://doi.org/10.2337/dci19-0014>
48. Malik VS, Hu FB. Fructose and cardiometabolic health. *Journal of the American College of Cardiology*. 2015;66(14):1615-1624. doi:<https://doi.org/10.1016/j.jacc.2015.08.025>
49. Horne BD, Grajower MM, Anderson JL. Limited evidence for the health effects and safety of intermittent fasting among patients with type 2 diabetes. *JAMA*. 2020;324(4):341. doi:<https://doi.org/10.1001/jama.2020.3908>
50. Dietary Guidelines for Americans 2020 -2025. USDA. Published 2020. Accessed April 21, 2024. https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf
51. Shan Z, Wang F, Li Y, et al. Healthy eating patterns and risk of total and cause-specific mortality. *JAMA Internal Medicine*. 2023;183(2):142-153. doi:<https://doi.org/10.1001/jamainternmed.2022.6117>
52. USDA. Your MyPlate Plan - 2000 calories, ages 14+. MyPlate. www.myplate.gov. Accessed April 21, 2024. <https://www.myplate.gov/myplate-plan/results/2000-calories-ages-14-plus>
53. Ding C, Chan Z, Magkos F. Lean, but not healthy: the "metabolically obese, normal-weight" phenotype. journals.lww.com. Published November 2016. Accessed April 21, 2024. <https://journals.lww.com/co-clinicalnutrition/Abstract/2016/11000/Lean>
54. CDC. Measuring physical activity intensity. *Physical Activity*. CDC. Published April 11, 2020. Accessed April 21, 2024. <https://www.cdc.gov/physicalactivity/basics/measuring/index.html>
55. American Diabetes Association. Weekly exercise targets. diabetes.org. Accessed April 23, 2024. <https://diabetes.org/health-wellness/fitness/weekly-exercise-targets>
56. Kanaley JA, Colberg SR, Corcoran MH, et al. Exercise/physical activity in individuals with type 2 diabetes: A consensus statement from the American College of Sports Medicine. *Medicine & Science in Sports & Exercise*. 2022;54(2):353-368. doi:<https://doi.org/10.1249/mss.0000000000002800>
57. U.S Department of Health and Human Services. The health consequences of smoking—50 years of progress. Nih.gov. Published 2014. Accessed April 23, 2024. <https://www.ncbi.nlm.nih.gov/books/NBK179276/>
58. Foy CG, Bell RA, Farmer DF, Goff DC, Wagenknecht LE. Smoking and incidence of diabetes among U.S. adults: Findings from the insulin resistance atherosclerosis study. *Diabetes Care*. 2005;28(10):2501-2507. doi:<https://doi.org/10.2337/diacare.28.10.2501>
59. D'Arrigo T. How does nicotine affect blood sugar? WebMD. Published July 7, 2023. Accessed April 23, 2024. <https://www.webmd.com/diabetes/nicotine-blood-sugar>
60. American Diabetes Association. Facilitating behavior change and well-being to improve health outcomes: Standards of Medical Care in Diabetes—2020. *Diabetes Care*. 2020;43(Supplement 1):S48-S65. doi:<https://doi.org/10.2337/dc20-s005>
61. Insaf Altun, Nursan Cinar, Dede C. The contributing factors to poor sleep experiences in according to the university students: A cross-sectional study. *Journal of Research in Medical Sciences: The Official Journal of Isfahan University of Medical Sciences*. 2012;17(6):557. Accessed April 23, 2024. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3634295/>
62. Tononi G, Cirelli C. Sleep function and synaptic homeostasis. *Sleep Medicine Reviews*. 2006;10(1):49-62. doi:<https://doi.org/10.1016/j.smrv.2005.05.002>
63. U.S. Department of Health and Human Services. National Institutes of Health. Your guide to healthy sleep. National Heart, Lung, and Blood Institute. *AMER ISBN 1-933236-04-3.*; 2011. Accessed April 23, 2024. https://www.nhlbi.nih.gov/files/docs/public/sleep/healthy_sleep.pdf
64. Vetter C, Dashti HS, Lane JM, et al. Night shift work, genetic risk, and type 2 diabetes in the UK Biobank. *Diabetes Care*. 2018;41(4):762-769. doi:<https://doi.org/10.2337/dci17-1933>
65. Gami AS, Olson EJ, Shen WK, et al. Obstructive sleep apnea and the risk of sudden cardiac death. *Journal of the American College of Cardiology*. 2013;62(7):610-616. doi:<https://doi.org/10.1016/j.jacc.2013.04.080>
66. Pippitt K, Li M, Gurgle HE. Diabetes Mellitus: Screening and diagnosis. *American Family Physician*. 2016;93(2):103-109. Accessed April 23, 2024. <https://www.aafp.org/pubs/afp/issues/2016/0115/p103.html>
67. Centers for Disease Control and Prevention. Diabetes risk factors. Diabetes. Published May 13, 2024. Accessed August 31, 2024. <https://www.cdc.gov/diabetes/risk-factors/index.html>

68. CDC. Get active. Diabetes. Published May 22, 2024. Accessed August 31, 2024. <https://www.cdc.gov/diabetes/living-with/physical-activity.html>
69. Wilcox G. Insulin and insulin resistance. *Clinical Biochemist Reviews*. 2005;26(2):19-39. Accessed April 23, 2024. <https://ncbi.nlm.nih.gov/pmc/articles/PMC1204764/>
70. Portillo-Sanchez P, Bril F, Maximos M, et al. High prevalence of nonalcoholic fatty liver disease in patients with type 2 diabetes mellitus and normal plasma aminotransferase levels. *The Journal of Clinical Endocrinology & Metabolism*. 2015;100(6):2231-2238. doi:<https://doi.org/10.1210/jc.2015-1966>
71. American Diabetes Association. Introduction: Standards of Medical Care in Diabetes—2020. *Diabetes Care*. 2020;43(Supplement 1):S1-S2. doi:<https://doi.org/10.2337/dc20-sint>
72. Insel RA, Dunne JL, Atkinson MA, et al. Staging presymptomatic type 1 diabetes: A scientific statement of JDRF. The Endocrine Society and the American Diabetes Association. *Diabetes Care*. 2015;38(10):1964-1974. doi:<https://doi.org/10.2337/dc15-1419>
73. Knowler WC, Barrett-Connor E, Fowler SE, et al. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *The New England Journal of Medicine*. 2002;346(6):393-403. doi:<https://doi.org/10.1056/NEJMoa012512>
74. Diabetes prevention program coverage. Medicare.gov. Accessed August 23, 2024. <https://www.medicare.gov/coverage/medicare-diabetes-prevention-program>
75. American Diabetes Association. Standards of Medical Care in Diabetes. Introduction. *Diabetes Care*. 2017;40(Supplement 1):S1-S2. doi:<https://doi.org/10.2337/dc17-s001>
76. ElSayed NA, Grazia Aleppo, Bannuru RR, et al. 4. Comprehensive medical evaluation and assessment of comorbidities: *Standards of Care in Diabetes—2024. Diabetes Care*. 2024;47(Supplement_1):S52-S76. doi:<https://doi.org/10.2337/dc24-s004>
77. Umpierrez GE, Klonoff DC. Diabetes technology update: Use of insulin pumps and continuous glucose monitoring in the hospital. *Diabetes Care*. 2018;41(8):1579-1589. doi:<https://doi.org/10.2337/dci18-0002>
78. Battelino T, Danne T, Bergenstal RM, et al. Clinical targets for continuous glucose monitoring data interpretation: Recommendations from the International Consensus on Time in Range. *Diabetes Care*. 2019;42(8):1593-1603. doi:<https://doi.org/10.2337/dci19-0028>
79. Riddlesworth TD, Beck RW, Gal RL, et al. Optimal sampling duration for continuous glucose monitoring to determine long-term glycemic control. *Diabetes Technology & Therapeutics*. 2018;20(4):314-316. doi:<https://doi.org/10.1089/dia.2017.0455>
80. Beck J, Greenwood DA, Blanton L, et al. 2017 National Standards for Diabetes Self-Management Education and Support. *The Diabetes Educator*. 2019;46(1):46-61. doi:<https://doi.org/10.1177/0145721719897952>
81. Lu J, Ma X, Zhou J, et al. Association of time in range, as assessed by continuous glucose monitoring, with diabetic retinopathy in type 2 diabetes. *Diabetes Care*. Published November 1, 2018. <https://doi.org/10.2337/dc18-1131>
82. American Diabetes Association. Glycemic targets: Standards of Medical Care in Diabetes—2020. *Diabetes Care*. 2020;43(Supplement 1):S66-S76. doi:<https://doi.org/10.2337/dc20-s006>
83. Beck RW, Bergenstal RM, Cheng P, et al. The relationships between time in range, hyperglycemia metrics, and HbA1c. *Journal of Diabetes Science and Technology*. 2019;13(4):614-626. doi:<https://doi.org/10.1177/1932296818822496>
84. Strawbridge LM, Lloyd JT, Meadow A, Riley GF, Howell BL. One-year outcomes of diabetes self-management training among Medicare beneficiaries newly diagnosed with diabetes. *Medical Care* 2017;55(4):391-397. doi:<https://doi.org/10.1097/MLR.0000000000000653>
85. Davies MJ, D'Alessio DA, Fradkin J, et al. Management of hyperglycemia in type 2 diabetes, 2018. A consensus report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). *Diabetes Care*. 2018;41(12):2669-2701. doi:<https://doi.org/10.2337/dci18-0033>
86. American Association of Diabetes Educators. An effective model of diabetes care and education: Revising the AADE7 Self-Care Behaviors®. *The Diabetes Educator*. 2020;46(2):014572171989490. doi:<https://doi.org/10.1177/0145721719894903>
87. ADCES7 Self-Care Behaviors for people with diabetes. ADCES. Published 2023. Accessed April 23, 2024. <https://www.adces.org/diabetes-education-dsmes/adces7-self-care-behaviors>
88. Beck J, Greenwood DA, Blanton L, et al. 2017 National Standards for Diabetes Self-Management Education and Support. *The Diabetes Educator*. 2017;43(5):449-464. doi:<https://doi.org/10.1177/0145721717722968>
89. Chrvala CA, Sherr D, Lipman RD. Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glycemic control. *Patient Education and Counseling*. 2019;99(6):926-943. doi:<https://doi.org/10.1016/j.pec.2015.11.003>
90. Powers MA, Bardsley JK, Cypress M, et al. Diabetes Self-management Education and Support in adults with type 2 diabetes: A consensus report of the American Diabetes Association. The Association of Diabetes Care and Education Specialists, the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of PAs, the American Association of Nurse Practitioners, and the American Pharmacists Association. *Diabetes Care*. 2020;43(7):1636-1649. doi:<https://doi.org/10.2337/dci20-0023>
91. ElSayed NA, Aleppo G, Aroda VR, et al. Glycemic targets: Standards of Care in Diabetes—2023. *Diabetes Care*. 2022;46(Supplement_1):S97-S110. doi:<https://doi.org/10.2337/dc23-s006>
92. CDC. Vaccine information for adults. Vaccine Information for Adults. Accessed September 17, 2024. https://www.cdc.gov/vaccines-adults/?CDC_AAref_Val=https://www.cdc.gov/vaccines/adults/rec-vac/health-conditions/diabetes/infographic/index.html
93. Association of Diabetes Care and Education Specialists (ADCES). Vaccination Practices for Adults with Diabetes Background/Rationale and Evidence. Published 2019. Accessed April 23, 2024. <https://www.adces.org/docs/default-source/practice/practice-documents/practice-papers/adces-vaccination-practices-for-adults-with-diabetes-final-4-2-20.pdf?sfvrsn=4>
94. Fleischman S. I am..., I have..., I suffer from...: A linguist reflects on the language of illness and disease. *Journal of Medical Humanities*. 1999;20(1):3-32. doi:<https://doi.org/10.1023/a:1022918132461>
95. Benedetti F. How the doctor's words affect the patient's brain. *Evaluation & the health professions*. 2002;25(4):369-386. doi:<https://doi.org/10.1177/0163278702238051>
96. Dickinson JK. The experience of diabetes-related language in diabetes care. *Diabetes Spectrum*. 2017;31(1): 58-64. doi:<https://doi.org/10.2337/ds16-0082>
97. Association of Diabetes Care and Education Specialists. Speaking the language of diabetes. Published 2024. Accessed September 17, 2024. https://www.adces.org/docs/default-source/handouts/culturalcompetency/handout_hcp_cc_diabeteslanguage.pdf?sfvrsn=4a3a6359_25
98. Office of Disease Prevention and Health Promotion. Health equity in Healthy People 2030. Health.gov. Published 2020. Accessed April 23, 2024. <https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030>
99. Braveman P, Arkin E, Orleans T, Proctor D, Plough A. What is health equity? RWJF. Published May 1, 2017. Accessed August 07, 2024. <https://www.rwjf.org/en/insights/our-research/2017/05/what-is-health-equity-.html>

100. County Health Rankings & Roadmaps. Explore health topics. What Impacts Health. Countyhealthrankings.org. Accessed August 07, 2024. <https://www.countyhealthrankings.org/what-impacts-health/county-health-rankings-model>
101. North Carolina Institute of Medicine. Healthy North Carolina 2030. NCIOM. Published December 20, 2018. Accessed August 07, 2024. <https://nciom.org/healthy-north-carolina-2030/>
102. County Health Rankings & Roadmaps. County Health Rankings Model. Published March 29, 2016. Accessed September 17, 2024. <https://www.countyhealthrankings.org/resources/county-health-rankings-model>
103. CDC. Advancing health equity. Centers for Disease Control and Prevention. Published March 15, 2024. Accessed August 07, 2024. <https://www.cdc.gov/diabetes/health-equity/index.html>
104. Carger E, Westen D. A new way to talk about the social determinants of health. rwjf.org. Published January 1, 2010. Accessed August 07, 2024. <https://www.rwjf.org/en/insights/our-research/2010/01/a-new-way-to-talk-about-the-social-determinants-of-health.html>
105. North Carolina Institute of Medicine, North Carolina Department of Health and Human Services. Healthy North Carolina 2030: A Path Towards Health. Published 2020. Accessed August 07, 2024. <https://nciom.org/wp-content/uploads/2020/01/HNC-REPORT-FINAL-Spread2.pdf>
106. Allen NA, Colicchio VD, Litchman ML, Gibson B, Villalta J, Sanchez-Birkhead AC. Hispanic community-engaged research: Community partners as our teachers to improve diabetes self-management. *Hispanic Health Care International*. 2019;17(3):125-132. doi:<https://doi.org/10.1177/1540415319843229>
107. Wroe J. How can the media be best used to influence the diabetes policy makers? *Practical Diabetes International*. 2006;23(4):178-182. doi:<https://doi.org/10.1002/pdi.939>
108. Gross TT, Story CR, Harvey IS, Allsopp M, Whitt-Glover M. "As a community, we need to be more health conscious": Pastors' perceptions on the health status of the Black Church and African-American communities. *Journal of racial and ethnic health disparities*. 2018;5(3):570-579. doi:<https://doi.org/10.1007/s40615-017-0401-x>
109. CDC. Faith Leaders Toolkit: Diabetes management and type 2 diabetes prevention. Diabetes. Published May 22, 2024. Accessed August 07, 2024. <https://www.cdc.gov/diabetes/php/cbo-guidance/faith-leaders-diabetes-prevention-management.html>
110. Miller RS, Mars D. Effectiveness of a diabetes education intervention in a faith-based organization utilizing the AADE7. *ADCES in Practice*. 2020;8(1):10-14. doi:<https://doi.org/10.1177/2633559x20887746>
111. Sawani J. A new type of church outreach: Diabetes Education. Michigan Health Lab. Published October 4, 2018. Accessed August 07, 2024. <https://www.michiganmedicine.org/health-lab/new-type-church-outreach-diabetes-education>
112. North Carolina's plan to address overweight and obesity. Eat Smart, Move More NC. Published 2020. Accessed March 26, 2024. <https://www.eatsmartmovemorenc.com/who-we-are/#ObesityPlan>
113. National Center for Biotechnology Information. 2 acting locally. Institute of Medicine (US) and National Research Council (US) Committee on Childhood Obesity Prevention Actions for Local Governments; Parker L, Burns AC, Sanchez E, ed. Washington (DC): National Academies Press (US); 2009. Accessed August 07, 2024. ncbi.nlm.nih.gov/books/NBK219685
114. Olenik NL, Fletcher LM, Gonzalvo JD. The community pharmacist as diabetes educator. *AADE in Practice*. 2015;3(5):46-50. doi:<https://doi.org/10.1177/2325160315597197>
115. Claypool TM. Pharmacy medication therapy management. *AADE in Practice*. 2015;3(2):12-16. doi:<https://doi.org/10.1177/2325160314568368>
116. Association of Diabetes Care and Education Specialists (ADCES). Community health workers as diabetes paraprofessionals in DSMES and prediabetes reviewed by professional practice committee. Published 2019. Accessed March 26, 2024. https://www.adces.org/docs/default-source/practice/practice-documents/practice-papers/adces-community-health-workers-as-diabetes-paraprofessionals-in-dsmes-and-prediabetes---final-4-1-20.pdf?sfvrsn=e4bc9858_6
117. Crespo R, Hatfield V, Hudson J, Justice M. Partnership with community health workers extends the reach of diabetes educators. *AADE in Practice*. 2015;3(2):24-29. doi:<https://doi.org/10.1177/2325160315569046>
118. Diabetes prevention: Interventions engaging community health workers improve risk factors and health outcomes | The community guide. www.thecommunityguide.org. Published October 18, 2022. Accessed March 26, 2024. <https://www.thecommunityguide.org/news/community-health-worker-interventions-help-prevent-diabetes.html>
119. Gabbay RA, Kendall D, Beebe C, et al. Addressing therapeutic inertia in 2020 and beyond: A 3-year initiative of the American Diabetes Association. *Clinical Diabetes*. 2020;38(4):371-381. doi:<https://doi.org/10.2337/cd20-0053>
120. American Diabetes Association. Act Now-Therapeutic Inertia in clinical practice: Self-assessment. Accessed March 26, 2024. https://professional.diabetes.org/sites/default/files/media/inertia_practice_assessment_final.pdf
121. American Diabetes Association. Getting to goal: Overcoming therapeutic inertia in diabetes care. Accessed March 26, 2024. https://professional.diabetes.org/sites/default/files/media/overcoming_therapeutic_inertia_factsheet_final.pdf
122. Blue Cross NC. Local barbershops and beauty salons are the "Heart" of new program to improve heart health. Blue Cross NC. Published 2020. Accessed March 26, 2024. <https://mediacenter.bcbsnc.com/news/local-barbershops-and-beauty-salons-are-the-heart-of-new-program-to-improve-heart-health>
123. Pearson TL, Bardsley J, Weiner S, Kolb L. Population health: The diabetes educator's evolving role. *The Diabetes Educator*. 2019;45(4):333-348. doi:<https://doi.org/10.1177/0145721719857728>
124. Green LW, Brancati FL, Albright A. Primary prevention of type 2 diabetes: integrative public health and primary care opportunities, challenges and strategies. *Family Practice*. 2012;29(suppl 1):i13-i23. doi:<https://doi.org/10.1093/fampra/cmr126>
125. U.S. Department of Health and Human Services. Preventing tobacco use among youth and young adults: A report of the Surgeon General. Published 2012. Accessed March 26, 2024. <https://www.hhs.gov/sites/default/files/preventing-youth-tobacco-use-exec-summary.pdf>
126. Lycett D, Nichols L, Ryan R, et al. The association between smoking cessation and glycaemic control in patients with type 2 diabetes: a THIN database cohort study. *The Lancet Diabetes & Endocrinology*. 2015;3(6):423-430. doi:[https://doi.org/10.1016/s2213-8587\(15\)00082-0](https://doi.org/10.1016/s2213-8587(15)00082-0)
127. Lajous M, Tondeur L, Fagherazzi G, de Lauzon-Guillain B, Boutron-Ruault MC, Clavel-Chapelon F. Childhood and adult secondhand smoke and type 2 diabetes in women. *Diabetes Care*. 2013;36(9):2720-2725. doi:<https://doi.org/10.2337/dc12-2173>
128. Knopf T. For many, Medicaid expansion is personal. North Carolina Health News. Published February 28, 2019. Accessed March 26, 2024. <https://www.northcarolinahealthnews.org/2019/02/28/for-many-medicaid-expansion-is-personal/>
129. American Diabetes Association. Introduction. *Diabetes Care*. 19(S1): S1-S118. Published January 1996. Accessed August 07, 2024. https://diabetesjournals.org/care/article/19/Supplement_1/S1/18635/Introduction



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

Departamento de Salud y Servicios Humanos de Carolina del Norte • División de Salud Pública www.publichealth.nc.gov • NCDHHS es un empleador y proveedor que ofrece igualdad de oportunidades.
11/2024



MANEJE EL PESO | VIVA LIBRE DE TABACO | PARTICIPE EN PROGRAMAS DE CAMBIO DE ESTILO DE VIDA
PARTICIPE EN EDUCACIÓN SOBRE LA DIABETES | PARTICIPE EN PLAN DE TRATAMIENTO | DUERMA LO SUFICIENTE