Diabetes Type 1 Diabetes | Type 2 Diabetes | MedlinePlus

An official website of the United States government Here's how you know

National Institutes of Health / National Library of Medicine

MedlinePlus 25

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Home → Health Topics → Diabetes

URL of this page:

https://medlineplus.gov/diabetes.html

Diabetes

Also called: Diabetes mellitus, DM

Diabetes is a disease in which your blood glucose, or blood sugar

[https://medlineplus.gov/bloodglucose.html], levels are too high. Glucose comes from the foods you eat. Insulin is a hormone that helps the glucose get into your cells to give them energy. With type 1 diabetes [https://medlineplus.gov/diabetestype1.html], your body does not make insulin. With type 2 diabetes [https://medlineplus.gov/diabetestype2.html], the more common type, your body does not make or use insulin well. Without enough insulin, the glucose stays in your blood. You can also have prediabetes [https://medlineplus.gov/prediabetes.html]. This means that your blood sugar is higher than normal but not high enough to be called diabetes. Having prediabetes puts you at a higher risk of getting type 2 diabetes.

Over time, having too much glucose in your blood can cause serious problems [https://medlineplus.gov/diabetescomplications.html]. It can damage your eyes

[https://medlineplus.gov/diabeticeyeproblems.html], kidneys

[https://medlineplus.gov/diabetickidneyproblems.html], and nerves

[https://medlineplus.gov/diabeticnerveproblems.html]. Diabetes can also cause heart disease

[https://medlineplus.gov/diabeticheartdisease.html], stroke and even the need to remove a limb. Pregnant

women can also get diabetes, called gestational diabetes

[https://medlineplus.gov/diabetesandpregnancy.html].

Blood tests can show if you have diabetes. One type of test, the A1C [https://medlineplus.gov/a1c.html],

can also check on how you are managing your diabetes. Exercise, weight control and sticking to your meal plan [https://medlineplus.gov/diabeticdiet.html] can help control your diabetes. You should also monitor your blood glucose level and take medicine [https://medlineplus.gov/diabetesmedicines.html] if prescribed.

NIH: National Institute of Diabetes and Digestive and Kidney Diseases

Start Here

Diabetes [https://familydoctor.org/condition/diabetes/?adfree=true] (American Academy of Family Physicians)

Managing Diabetes [https://www.niddk.nih.gov/health-information/diabetes/overview/managing-diabetes]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/diabetes/informacion-general/control]

• What is Diabetes? [https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/diabetes/informacion-general/que-es]

https://medlineplus.gov/diabetes.ht ml#

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Diagnosis and Tests

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- A1C: MedlinePlus Health Topic [https://medlineplus.gov/a1c.html] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/a1c.html]
- At-Home Medical Tests [https://medlineplus.gov/lab-tests/at-home-medical-tests/] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/pruebas-medicas-en-el-hogar/]
 - Blood Glucose Test [https://medlineplus.gov/lab-tests/blood-glucose-testπ] NIH (National

Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-glucosa-en-la-sangre/]

• **Diabetes** Tests and Diagnosis [https://www.niddk.nih.gov/health-information/diabetes/overview/tests-diagnosis]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/diabetes/informacion-general/pruebas- diagnostico]

Glucagon Blood Test [https://medlineplus.gov/lab-tests/glucagon-blood-test] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/analisis-de-sangre-de-glucagon/]

Glucose in Urine Test [https://medlineplus.gov/lab-tests/glucose-in-urine-test/] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-glucosa-en-la-orina/]

Ketones in Blood [https://medlineplus.gov/lab-tests/ketones-in-blood/] NIH (National Library of Medicine)

Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-cetonas-ensangre/]

• Ketones in Urine [https://medlineplus.gov/lab-tests/ketones-in-urine/] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-decetonas-en-la-orina/]

Prevention and Risk Factors

How to Prevent Diabetes: MedlinePlus Health Topic [https://medlineplus.gov/howtopreventdiabetes.html]

NIH (National Library of Medicine)

Also in Spanish

[https://medlineplus.gov/spanish/howtopreventdiabetes.html]

Treatments and Therapies

Diabetes Medicines: MedlinePlus Health Topic [https://medlineplus.gov/diabetesmedicines.html]

NIH (National Library of Medicine)

Also in Spanish

[https://medlineplus.gov/spanish/diabetesmedicines.html]

Living With

Changing Your Habits for Better Health [https://www.niddk.nih.gov/health-information/diet-nutrition/changing- habits-better-health] NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/alimentacion-nutricion/como-cambiar-sus-

habitos-para-tener-una-mejorsalud]

Diabetes and Digestion [https://www.heart.org/en/health-topics/diabetes/about-diabetes/prediabetes-and-digestion] (American Heart Association)

- Diabetes and **DKA** (Ketoacidosis) [https://diabetes.org/about-diabetes/complications/ketoacidosis-dka/dkaketoacidosis-ketones] (American Diabetes Association)
- Diabetes and Mental Health [https://www.cdc.gov/diabetes/living-with/mental-health.html]

(Centers for Disease Control and Prevention)

Also in Spanish [https://www.cdc.gov/diabetes/es/living-with/la-diabetes-y-la-salud-mental.html]

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• Diabetic Diet: MedlinePlus Health Topic [https://medlineplus.gov/diabeticdiet.html] NIH (National

Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/diabeticdiet.html]

Healthy Weight [https://www.cdc.gov/diabetes/living-with/healthy-weight.html]

(Centers for Disease Control and Prevention)

Managing Diabetes in the Heat [https://www.cdc.gov/diabetes/articles/managing-diabetes-in-the-heat.html] (Centers for Disease Control and Prevention)

Take Diabetes to Heart [https://www.nhlbi.nih.gov/resources/take-diabetes-heart-fact-sheet]

NIH Easy-to-*Read* (National Heart, Lung, and Blood Institute) - PDF

Tips for Traveling with Diabetes [https://www.cdc.gov/diabetes/about/tips-for-traveling-with-diabetes.html] (Centers for Disease Control and Prevention)

Your Diabetes Care Team [https://www.cdc.gov/diabetes/treatment/diabetes-doctors.html]

(Mayo Foundation for Medical Education and Research)

Related Issues

A1C Test and Race/Ethnicity [https://www.niddk.nih.gov/health-information/diagnostic-tests/a1c-test-race-ethnicity]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Healthy Living with Diabetes [https://www.niddk.nih.gov/health-information/diabetes/overview/healthy-living-with-

diabetes?dkrd-/health-information/diabetes/overview/diet-eating-physical-activity]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/diabetes/informacion-general/nutricion-alimentacion-actividad-fisica]

Hyperinsulinemia: Is it diabetes? [https://www.mayoclinic.org/diseases-conditions/type-2-diabetes/expert- answers/hyperinsulinemia/FAQ-20058488?p=1] (Mayo Foundation for Medical Education and Research)

Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/type-2-diabetes/expert-answers/hyperinsulinemia/FAQ- 20058488?p=1]

People at Higher Risk of Flu Complications [https://www.cdc.gov/flu/highrisk/]

(Centers for Disease Control and Prevention)

Also in Spanish

[https://espanol.cdc.gov/flu/highrisk/index.htm]

People with Diabetes and Hepatitis B

[https://www.cdc.gov/hepatitis/populations/diabetes.htm] (Centers for Disease Control and Prevention)

Prediabetes:MedlinePlus **Health** Topic [https://medlineplus.gov/prediabetes.html] NIH (National Library of Medicine) Also in Spanish [https://medlineplus.gov/spanish/prediabetes.html]

Speak Up -- Diabetes: Five Ways to Be Active in Your Care at the Hospital

[https://www.jointcommission.org/-/media/tjc/documents/resources/speak-up/diabetes_brochure-5-15-2020.pdf]

(Joint Commission) - PDF

Symptoms and Causes of Diabetes [https://www.niddk.nih.gov/health-information/diabetes/overview/symptoms- causes] NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [https://www.niddk.nih.gov/health-information/informacion-de-la-salud/diabetes/informacion-general/sintomas-causas]

Vaccinations for Adults with Diabetes [https://www.immunize.org/wp-content/uploads/catg.d/p4043.pdf] (Immunization Action Coalition) - PDF

Genetics

17q12 deletion syndrome: MedlinePlus Genetics
[https://medlineplus.gov/genetics/condition/17q12-deletion-syndrome] NIH (National Library of Medicine)

https://medlineplus.gov/diabetes.ht ml#

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6q24-related transient neonatal diabetes mellitus: MedlinePlus Genetics [https://medlineplus.gov/genetics/condition/6q24-related-transient-neonatal-diabetes-mellitus]

NIH (National Library of Medicine)

Congenital generalized lipodystrophy: MedlinePlus

Genetics

[https://medlineplus.gov/genetics/condition/congenital-generalized-lipodystrophy] NIH) (National Library of Medicine)

Familial partial lipodystrophy: MedlinePlus Genetics [https://medlineplus.gov/genetics/condition/familial-partial-lipodystrophy] NIH (National Library of Medicine)

Genetics of Diabetes [https://diabetes.org/about-diabetes/genetics-diabetes] (American Diabetes Association)

Maternally inherited diabetes and deafness: MedlinePlus Genetics

[https://medlineplus.gov/genetics/condition/maternally-inherited-diabetes-and-deafness]

NIH (National Library of Medicine)

Maturity-onset diabetes of the young: MedlinePlus Genetics
 [https://medlineplus.gov/genetics/condition/maturity-onset-diabetes-of-the-young] NIH (National Library of Medicine)

Monogenic Forms of Diabetes: Neonatal Diabetes **Mellitus** and **Maturity**-Onset Diabetes **of the** Young [https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes/monogenic-neonatal-mellitus-

mody] NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Thiamine-responsive megaloblastic anemia syndrome: MedlinePlus Genetics

[https://medlineplus.gov/genetics/condition/thiamine-responsive-megaloblastic-anemia-syndrome]

NIH (National Library of Medicine)

Type A insulin resistance syndrome: MedlinePlus Genetics [https://medlineplus.gov/genetics/condition/type-a- insulin-resistance-syndrome] NIH (National Library of Medicine)

 Wolfram syndrome: MedlinePlus Genetics [https://medlineplus.gov/genetics/condition/wolframsyndrome]

NIH (National Library of Medicine)

Test Your Knowledge

Type **2 Diabetes Facts Quiz** [https://medlineplus.gov/ency/quiz/001214_3.htm] (**Medical Encyclopedia**)

Also in Spanish

[https://medlineplus.gov/spanish/ency/quiz/001214_63.htm]

Statistics and Research

- Diabetes in America, 3rd Edition [https://www.niddk.nih.gov/about-niddk/strategic-plans-reports/diabetes-in- america-3rd-edition] NIH (National Institute of Diabetes and Digestive and Kidney Diseases)
- Diabetes Interactive Atlas
 [https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html]

(Centers for Disease Control and Prevention)

FastStats: Diabetes [https://www.cdc.gov/nchs/fastats/diabetes.htm] (National Center for Health Statistics)

National Diabetes **Statistics Report**[https://www.cdc.gov/diabetes/php/data-research/] (Centers for Disease Control and Prevention)

Native Americans with Diabetes [https://www.cdc.gov/vitalsigns/pdf/2017-01-vitalsigns.pdf]

(Centers for Disease Control and Prevention) - PDF

Recent Advances (in Diabetes Research) [https://diabetes.org/recent-advances] (American Diabetes Association)

https://medlineplus.gov/diabetes.ht ml#

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Clinical Trials

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• ClinicalTrials.gov: Diabetes Mellitus

[https://clinicaltrials.gov/search?

cond=%22Diabetes+Mellitus%22&aggFilters=status:not%20rec] NIH (National Institutes of Health)

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Impact of telemedical management on **hospitalization** and **mortality in** heart failure... [https://www.ncbi.nlm.nih.gov/pubmed/38867198]
- Article: Effectiveness of a theory-based foot care education program on self-efficacy and...
 [https://www.ncbi.nlm.nih.gov/pubmed/38608160]
- Article: A purified reconstituted bilayer matrix shows improved outcomes in treatment of... [https://www.ncbi.nlm.nih.gov/pubmed/38606794]

Diabetes -- see more articles [https://pubmed.ncbi.nlm.nih.gov/?

term=%22Diabetes**+Mellitus%22%**5Bmajr**%**3Anoexp**%5D+AND+humans%**5Bmh%5D+**AND+english %5Bla%5D+**

AND+%22last+1+Year%22+%5Bedat%5D+AND+%28patient+education+handout%5Bpt%5D+OR+guideline%5Bpt%5D+OR+clinical+trial%5Bpt%5D%29++NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+]

Reference Desk

 Common Terms [https://diabetes.org/about-diabetes/common-terms] (American Diabetes Association)

Find an Expert

American Diabetes Association [https://diabetes.org/]

Find a Diabetes Educator [https://nf01.diabeteseducator.org/eweb/DynamicPage.aspx? Site=AADE&WebCode=AADEDiaEduDirectory] (Association of Diabetes Care and Education Specialists)

- National Institute of Diabetes and Digestive and Kidney Diseases [https://www.niddk.nih.gov] NIH)
- NIDDK Information Clearinghouses and Health Information Center
 [https://www.niddk.nih.gov/health-information/community-health-outreach/information-clearinghouses]

NIH (National Institute of Diabetes and Digestive and Kidney Diseases)

Women

• Diabetes [https://www.womenshealth.gov/a-z-topics/diabetes] (Department of Health and Human Services, Office on Women's Health) Also in Spanish [https://espanol.womenshealth.gov/a-z-topics/diabetes]

Older Adults

- Diabetes [https://www.healthinaging.org/a-z-topic/diabetes] (AGS Health in Aging Foundation)
- Diabetes in Older People [https://www.nia.nih.gov/health/diabetes/diabetes-older-people]

NIH (National Institute on Aging)

Also in Spanish [https://www.nia.nih.gov/espanol/diabetes/diabetes-personas-mayores]

https://medlineplus.gov/diabetes.ht ml#

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Patient Handouts

Diabetes Type 1 Diabetes | Type 2 Diabetes | MedlinePlus

A1C test [https://medlineplus.gov/ency/article/003640.htm] (Medical

Encyclopedia)

Also in Spanish

[https://medlineplus.gov/spanish/ency/article/003640.htm]

Blood sugar test [https://medlineplus.gov/ency/article/003482.htm] (Medical

Encyclopedia)

Also in Spanish

[https://medlineplus.gov/spanish/ency/article/003482.htm]

Diabetes [https://medlineplus.gov/ency/article/001214.htm] (Medical

Encyclopedia)

Also in Spanish

[https://medlineplus.gov/spanish/ency/article/001214.htm]

• Diabetes - keeping active [https://medlineplus.gov/ency/patientinstructions/000084.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000084.htm]

Diabetes - when you are sick [https://medlineplus.gov/ency/patientinstructions/000079.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000079.htm]

Diabetes and exercise [https://medlineplus.gov/ency/patientinstructions/000083.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000083.htm]

- Diabetes myths and facts [https://medlineplus.gov/ency/patientinstructions/000964.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000964.htm]
- **Diabetes** tests and checkups [https://medlineplus.gov/ency/patientinstructions/000082.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000082.htm]

Giving an insulin injection [https://medlineplus.gov/ency/patientinstructions/000660.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000660.htm]

High blood sugar - self-care [https://medlineplus.gov/ency/patientinstructions/000332.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000332.htm]

• Low blood sugar - self-care [https://medlineplus.gov/ency/patientinstructions/000085.htm] (Medical Encyclopedia) Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000085.htm]

MEDICAL ENCYCLOPEDIA

A1C test

[https://medlineplus.gov/ency/article/003640.htm]

ACE blood **test** [https://medlineplus.gov/ency/article/003567.htm]

Anti-insulin antibody test [https://medlineplus.gov/ency/article/003375.htm]

https://medlineplus.gov/diabetes.ht ml#

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Blood sugar test

[https://medlineplus.gov/ency/article/003482.htm]

Diabetes

[https://medlineplus.gov/ency/article/001214.htm]

Diabetes - keeping active

[https://medlineplus.gov/ency/patientinstructions/000084.htm]

Diabetes - when you are sick

[https://medlineplus.gov/ency/patientinstructions/000079.htm]

Diabetes and exercise

[https://medlineplus.gov/ency/patientinstructions/000083.htm]

Diabetes myths and facts

[https://medlineplus.gov/ency/patientinstructions/000964.htm]

Diabetes tests and checkups

[https://medlineplus.gov/ency/patientinstructions/000082.htm]

Giving an insulin injection

[https://medlineplus.gov/ency/patientinstructions/000660.htm]

Glucose tolerance test - non-pregnant

[https://medlineplus.gov/ency/article/003466.htm]

Glucose urine test

[https://medlineplus.gov/ency/article/003581.htm]

High blood sugar - self-care

[https://medlineplus.gov/ency/patientinstructions/000332.htm]

Immunizations for people with diabetes

[https://medlineplus.gov/ency/patientinstructions/000331.htm]

Insulin C-peptide test

[https://medlineplus.gov/ency/article/003701.htm]

Ketones blood test

[https://medlineplus.gov/ency/article/003498.htm]

Ketones urine test [https://medlineplus.gov/ency/article/003585.htm]

Lactic acidosis

[https://medlineplus.gov/ency/article/000391.htm]

Low blood sugar - self-care

[https://medlineplus.gov/ency/patientinstructions/000085.htm]

Preparing for surgery when you have diabetes [https://medlineplus.gov/ency/patientinstructions/000702.htm]

Related Health Topics

A1C

[https://medlineplus.gov/a1c.html]

Blood Glucose

[https://medlineplus.gov/bloodglucose.html]

Diabetes and **Pregnancy [https://medlineplus.gov/diabetesand** pregnancy.html]

Diabetes Complications

[https://medlineplus.gov/diabetescomplications.html]

Diabetes in Children and Teens [https://medlineplus.gov/diabetesinchildrenandteens.html]

Diabetes Medicines

[https://medlineplus.gov/diabetesmedicines.html]

Diabetes Type 1

[https://medlineplus.gov/diabetestype1.html]

Diabetes Type 2

[https://medlineplus.gov/diabetestype2.html]

Diabetic Diet

[https://medlineplus.gov/diabeticdiet.html]

Diabetic Eye Problems

[https://medlineplus.gov/diabeticeyeproblems.html]

Diabetic Foot [https://medlineplus.gov/diabeticfoot.html]

Diabetic Heart Disease

[https://medlineplus.gov/diabeticheartdisease.html]

Diabetic **Kidney** Problems

[https://medlineplus.gov/diabetickidneyproblems.html]

https://medlineplus.gov/diabetes.ht ml#

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Diabetic Nerve Problems [https://medlineplus.gov/diabeticnerveproblems.html]

Hyperglycemia

[https://medlineplus.gov/hyperglycemia.html]

Hypoglycemia

[https://medlineplus.gov/hypoglycemia.html]

Islet Cell Transplantation

[https://medlineplus.gov/isletcelltransplantation.html]

Pancreas Transplantation [https://medlineplus.gov/pancreastransplantation.html]

Prediabetes

[https://medlineplus.gov/prediabetes.html]

National Institutes of Health

The primary NIH organization for research on *Diabetes* is the **National** Institute of Diabetes and **Digestive** and Kidney Diseases [https://www.niddk.nih.gov]

Other Languages

Find health information in languages other than **English** [https://medlineplus.gov/languages/diabetes.html] on **Diabetes**

NIH MedlinePlus Magazine

Diabetes: What You Need to Know [https://magazine.medlineplus.gov/article/diabetes-what-you-need-to-know]

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