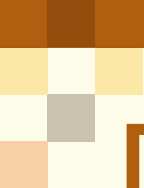


National Institute of Mental Health

Depression and Diabetes



NIMH
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of Mental Health



Depression not only affects your brain and behavior—it affects your entire body.

Depression has been linked with other health problems, including diabetes. Dealing with more than one health problem at a time can be difficult, so proper treatment is important.



What is depression?

Major depressive disorder, or depression, is a serious mental illness. Depression interferes with your daily life and routine and reduces your quality of life. About 6.7 percent of U.S. adults ages 18 and older have depression.¹

Signs and Symptoms of Depression

- Ongoing sad, anxious, or empty feelings
- Feeling hopeless
- Feeling guilty, worthless, or helpless
- Feeling irritable or restless
- Loss of interest in activities or hobbies once enjoyable, including sex
- Feeling tired all the time
- Difficulty concentrating, remembering details, or making decisions
- Difficulty falling asleep or staying asleep, a condition called insomnia, or sleeping all the time
- Overeating or loss of appetite
- Thoughts of death and suicide or suicide attempts
- Ongoing aches and pains, headaches, cramps, or digestive problems that do not ease with treatment.

For more information, see the NIMH booklet on Depression at <http://www.nimh.nih.gov/health/publications/depression/index.shtml>.

What is diabetes?

Diabetes is an illness that affects the way the body uses digested food for energy. Most of the food we eat is broken down into a type of sugar called glucose. Glucose is an important source of fuel for the body and the main source of fuel for the brain. The body also produces a hormone called insulin. Insulin helps cells throughout the body absorb glucose and use it for energy. Diabetes reduces or destroys the body's ability to make or use insulin properly. Without insulin, glucose builds up in the blood, and the body's cells are starved of energy.

How are depression and diabetes linked?

Studies show that depression and diabetes may be linked, but scientists do not yet know whether depression increases the risk of diabetes or diabetes increases the risk of depression. Current research suggests that both cases are possible.

In addition to possibly increasing your risk for depression, diabetes may make symptoms of depression worse. The stress of managing diabetes every day and the effects of diabetes on the brain may contribute to depression.^{2,3} In the United States, people with diabetes are twice as likely as the average person to have depression.⁴

At the same time, some symptoms of depression may reduce overall physical and mental health, not only increasing your risk for diabetes but making diabetes symptoms worse. For example, overeating may cause weight gain, a major risk factor for diabetes. Fatigue or feelings of worthlessness may cause you to ignore a special diet or medication plan needed to control your diabetes, worsening your diabetes symptoms. Studies have shown that people with diabetes and depression have more severe diabetes symptoms than people who have diabetes alone.⁴

How is depression treated in people who have diabetes?

Depression is diagnosed and treated by a health care provider. Treating depression can help you manage your diabetes and improve your overall health. Scientists report that for people who have diabetes and depression, treating depression can raise mood levels and increase blood glucose control.⁵ Recovery from depression takes time but treatments are effective.

At present, the most common treatments for depression include:

- Cognitive behavioral therapy (CBT), a type of psychotherapy, or talk therapy, that helps people change negative thinking styles and behaviors that may contribute to their depression

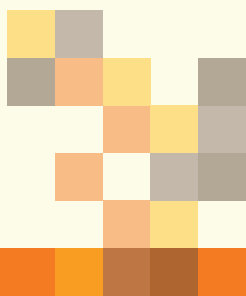
- Selective serotonin reuptake inhibitor (SSRI), a type of antidepressant medication that includes citalopram (Celexa), sertraline (Zoloft), and fluoxetine (Prozac)
- Serotonin and norepinephrine reuptake inhibitor (SNRI), a type of antidepressant medication similar to SSRI that includes venlafaxine (Effexor) and duloxetine (Cymbalta).

Some antidepressants may cause weight gain as a side effect and may not be the best depression treatment if you have diabetes. These include:

- Tricyclics
- Monoamine oxidase inhibitors (MAOIs)
- Paroxetine (Paxil), an SSRI⁶
- Mirtazapine (Remeron)

While currently available depression treatments are generally well tolerated and safe, talk with your health care provider about side effects, possible drug interactions, and other treatment options. For the latest information on medications, visit the U.S. Food and Drug Administration website at <http://www.fda.gov>. Not everyone responds to treatment the same way. Medications can take several weeks to work, may need to be combined with ongoing talk therapy, or may need to be changed or adjusted to minimize side effects and achieve the best results.

More information about depression treatments can be found on the NIMH website at <http://www.nimh.nih.gov/health/publications/depression/how-is-depression-detected-and-treated.shtml>. If you think you are depressed or know someone who is, don't lose hope. Seek help for depression.



For More Information on Depression

Visit the National Library of Medicine's

MedlinePlus <http://medlineplus.gov>

En Español <http://medlineplus.gov/spanish>

For information on clinical trials

<http://www.nimh.nih.gov/health/trials/index.shtml>

National Library of Medicine clinical trials database

<http://www.clinicaltrials.gov>

Information from NIMH is available in multiple formats. You can browse online, download documents in PDF, and order materials through the mail. Check the NIMH website at

<http://www.nimh.nih.gov> for the latest information on this topic and to order publications. If you do not have Internet access please contact the NIMH Information Resource Center at the numbers listed below.

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E-mail: nimhinfo@nih.gov

Website: <http://www.nimh.nih.gov>

For More Information on Diabetes

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

National Diabetes Information Clearinghouse

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Bethesda, MD 20892-3560

Phone: 1-800-860-8747

TTY: 1-866-569-1162

Fax: 703-738-4929

E-mail: ndic@info.niddk.nih.gov

Website: <http://www.diabetes.niddk.nih.gov>

Citations

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