

NIH News in Health

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Healthy Social Media Habits

How You Use It Matters

Technology has changed the way we interact with each other. Social media puts other people just keystrokes away. This helps some feel like they have more social support. But for others, it can increase isolation and depression.

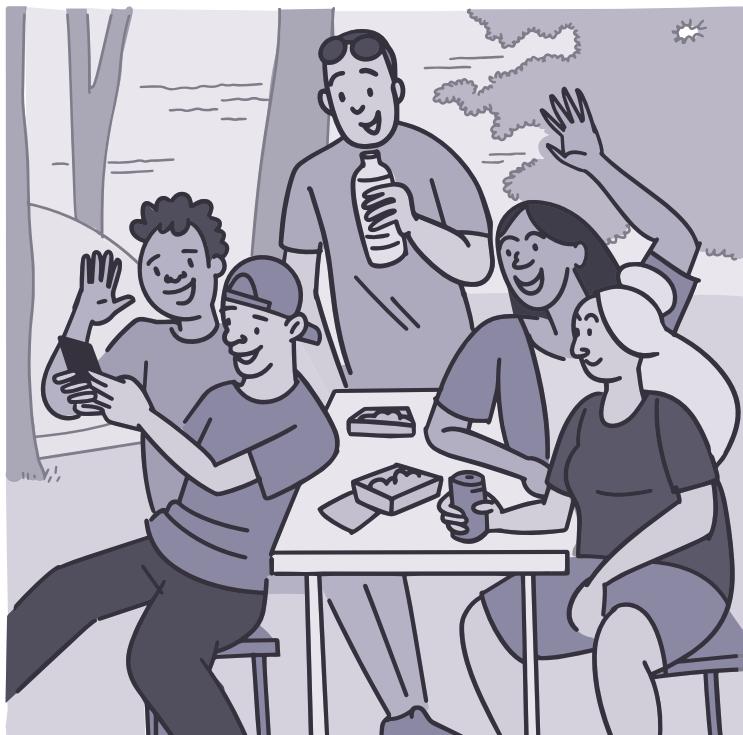
Researchers are investigating how social media affects mental health. They're learning that who you meet and what you find online can mean the difference between helpful and harmful effects.

Use Your Time Wisely • Logging into social media can lead you in many directions. Actively engaging and connecting with others online can help build your social supports—both online and offline. But spending many hours passively scrolling through upsetting content can send you spiraling into negative thoughts and feelings.

Increased social media use has been linked to symptoms of depression, anxiety, and stress. But it's not always clear which comes first: Is more time online causing the symptoms or a result of the symptoms?

Depression or anxiety can cause you to isolate yourself. Spending more time online may be a sign that you're withdrawing from others.

Studies have also found that some online activities can worsen your mental health. Passively watching what others are doing online can make you feel more isolated. You



might feel you're missing out or being left out. Or it can make you think that other people have better lives than you.

What you click on then affects what you see next. If you click on things that bother you, you're likely to be shown more of those things. Repeated scrolling through disturbing content can increase your stress and anxiety.

Teens are especially at risk from the effects of social media. Studies have found links between patterns in teens' social media use and mental health problems.

"There has been a growth in social media use, smartphone use, and teens' lives being online over the last 10 years," says Dr. Katherine Keyes at Columbia University. Rates of teen depression and suicide also rose

over the past 10 years. Researchers have been looking at social media's role in that increase.

Keyes's studies have shown that digital media use alone doesn't account for these recent rises in depression and suicide. Other factors must also play a role. More research is needed to figure out what those are.

What seems most important is how teens are using social media and how their time online is affecting their offline social networks and activities, Keyes says.

In other words, time online takes away from time you could

be spending with others, being physically active, or doing a hobby. These are things that help protect your mental health.

Connect Carefully • You can find countless different people and communities online. "Many meaningful and beneficial connections can be made online," says Keyes. "This is especially true for teens who have more marginalized identities. Some-

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times they can find community and connectivity online that they can't get in their day-to-day lives."

But the digital world can also expose you to harmful health behaviors. Excessive drinking, substance use, and eating disorders are sometimes misleadingly shown as what everyone's doing or wants to do.

People also see ads about tobacco use, cannabis use, and drinking online. Dr. Patricia Cavazos-Rehg at Washington University in St. Louis studies the effects of ads on teen substance use. Her research has shown that even passively viewing tobacco content online increased the likelihood of using tobacco products. Keyes found similar trends for alcohol and cannabis.

"My concern is that social media can make substance use behaviors seem normal," Cavazos-Rehg explains. That can affect both teens and adults.

"We've seen a lot of messages online about 'wine-mom' culture that link alcohol use with 'mommy needs a break at the end of the day,'" Keyes says. "These messages link alcohol with positive self-care." But using alcohol to manage stress is not

a healthy coping strategy. In recent years, women have had a higher increase in alcohol use than men.

Cavazos-Rehg is researching ways to deliver information about the risks of substance use on social media. She's also looking at how to get quality treatment information to people talking about mental health issues and substance use online.

Seek Out Help • Social media can be a tool to improve your mental health. You can search for health information, hear about others' experiences, or find treatment options.

"We have found that social media can be very helpful for people who are feeling stigmatized about in-person recovery," Cavazos-Rehg says. "Plus, social media can help those who are curious or ready to engage in treatment but want advice from their online peers first."

Her team looked at what prevents people with symptoms of depression from seeking treatment. They found that many people worry about being stigmatized. Others have trouble accessing or paying for treatment.

Her team is looking for ways to reduce those barriers through social media. They've created tools to identify social media posts that may indicate someone needs treatment for an eating disorder. They also created a treatment app for teens with eating disorders. The team is working to reach teens in need of treatment through online ads as well.

"There is a lot of support for recovery and for mental health that individuals can get off of social media," says Cavazos-Rehg. "But there's often misinformation that can spread as well." Find tips for evaluating online health information at go.usa.gov/xSv9n and go.usa.gov/xSv9P.

Remember, you don't need to struggle with mental health problems alone. "There's a common misconception that we can handle

our mental health problems on our own, and that they're not severe enough to warrant medical care," Cavazos-Rehg says. "But that's a misconception." Don't hesitate to reach out to a health care provider or mental health professional. ■



Wise Choices

Protect Your Mental Health

- **Take care of your body and mind.** Stick to a schedule, eat well, stay physically active, get quality sleep, stay hydrated, and spend time outside.
- **Invest in healthy relationships.** Socializing is a powerful buffer to stress and a source of well-being. Spend time with others regularly, in-person and virtually.
- **Be intentional about your use of social media, video games, and other technologies.** Ask yourself: How much time am I spending online? Is it taking away from healthy offline activities, like exercising, seeing friends, reading, or sleeping? What content do I see, and how does it make me feel?
- **Learn to manage stress and other difficult emotions.** Try to recognize situations that may be emotionally challenging and come up with strategies to manage those emotions.
- **Ask for help.** Find someone you trust to talk to about stressful situations. If you are struggling to manage negative emotions, reach out to a health care provider, counselor, or person you trust.
- **Call or text the Suicide & Crisis Lifeline at 988 if you or someone you know is in crisis.**
- **Get help finding substance use and mental health treatment in your area.** Call the free National Helpline 1-800-662-HELP (4357) or visit www.FindTreatment.gov.

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Web Links

For more about social media and health,
see "Links" in the online article:
newsinhealth.nih.gov/2022/09/healthy-social-media-habits

Cloudy Vision?

It Could Be Cataracts

Your eyes are your windows to the world. If something clouds them, you may have trouble seeing well enough to read, drive, or do other daily activities.

One common cause of cloudy vision is cataracts. These form in the lens of your eye. Cataracts are a normal part of aging. They occur when proteins in the lens break down over time and clump together.

The risk of getting cataracts rises as you get older. More than half of people in the U.S. over the age of 80 either have cataracts or have had surgery to remove them.

"Everybody who lives long enough gets cataracts," says Dr. Chantal Cousineau-Krieger, an eye surgeon at NIH.

Some people may develop cataracts at an earlier age than others. Smoking or exposure to lots of sunlight can increase the risk of cataracts. Certain types of eye surgeries and injuries can trigger a cataract. Some medications can also raise your risk.

Cataracts may not cause symptoms when they first form. But over time, your vision can become cloudy or blurry. Colors may look faded. You might not be able to see as well at night as you used to. Lamps, sunlight, or headlights can seem too bright. You may notice a halo around light sources. Or you may start to see two images instead of one.

These symptoms can also be a sign of other common eye problems. If you have problems with your vision, talk with an eye doctor. They can perform a dilated eye exam. These



exams use eye drops to widen part of your eye called the pupil. The doctor can then look into your eye for cataracts and other problems.

If you have mild cataracts, using a magnifying lens and brighter lights can help you see better inside. Sunglasses that reduce glare can help with vision outside.

Cataracts that are bad enough to interfere with daily activities can be treated with surgery. An eye surgeon first uses **ultrasound** or a laser to break up the cloudy lens. Then, they put a new plastic lens in its place.

A bonus from cataract surgery is that the new lens can often improve how well you see objects at a distance, explains Cousineau-Krieger. "We're always aiming to get you the best vision that we can and reduce your dependence on glasses," she says.

People are awake during cataract surgery. "But we give you medicine to make you comfortable and relaxed. It's not a painful procedure

or a painful recovery," says Cousineau-Krieger. "Overall, it's a very low-risk surgery. And the benefits are tremendous. By the next day, most patients have better vision than they came in with."

NIH-funded researchers are working to better understand what makes proteins in the eye clump and cause cataracts. Eventually, their goal is to develop drugs that can prevent cataracts or even reverse them.

"Right now, you can't reverse a cataract once it's started. But you might be able to slow the rate of progression," Cousineau-Krieger says.

See the Wise Choices box for tips to help delay cataracts and protect your vision. ■



Wise Choices

Keep Your Vision Clear

To reduce your risk of cataracts and vision problems:

- **Wear sunglasses and a hat with a brim when outside.** These help keep the sun's harmful UV rays from reaching your eyes.
- **Quit smoking.** You can get free help quitting at 1-800-QUIT-NOW or smokefree.gov.
- **Eat healthy.** Eat plenty of fruits and vegetables. Include lots of dark, leafy greens in your diet.
- **Get a dilated eye exam.** If you don't have vision insurance, many places offer free or low-cost eye care. Find out more at go.usa.gov/xSyGM.



Definitions

Ultrasound

High-frequency sound waves that can't be heard by the human ear.



Web Links

For more about cataracts, see "Links" in the online article:
newsinhealth.nih.gov/2022/09/cloudy-vision



Health Capsules

For links to more information, please visit our website and see these stories online.

Tracking COVID-19 in Wastewater

If you're infected with SARS-CoV-2, the virus that causes COVID-19, you shed virus down the drain each time you wash your hands or use the toilet. This happens even if you don't have symptoms. Scientists have been tracking levels of SARS-CoV-2 in wastewater for early clues about infections in cities and towns.

Wastewater tracking has some advantages over clinical tests. It's much less expensive. And it doesn't require people to seek out testing. But this method hadn't been able to

track specific variants of the virus.

A team of researchers designed a new system to get more detailed information about SARS-CoV-2 variants from wastewater. They adapted a magnetic nanobead that can capture more of the virus's genetic material from water. They also built a computer program that quickly recognizes small pieces of the genetic material.

Researchers tested the system for a year in San Diego, California. It picked out new variants, like Delta

and Omicron, weeks before they showed up in clinical tests. The system also found variants rarely seen in the clinic.

"Tracking new variants of concern in the clinic is slow and expensive," explains Dr. Kristian Andersen from Scripps Research Institute, who co-led the study. "But with this new tool, you can take one wastewater sample and basically profile the whole city."

The team is now expanding the program to track other viruses. ■

Monkeypox: What You Should Know

You may have heard that an outbreak of monkeypox is spreading across the country.

The virus got its name because it was first discovered in monkeys in 1958. But it likely came from other animals. Since then, the virus has also infected people. Until recently, most monkeypox infections were in Africa. But due to international travel, the illness has reached several parts of the world.

Monkeypox symptoms can be severe and painful. They can include fever, headache, chills, and a rash

of sores that look like pimples or blisters. The rash may be located on or near the genitals or in other areas like the hands, feet, or face.

Anyone who has been in close contact with someone who has monkeypox is at risk for infection. The virus usually spreads by three main routes: by touching a rash or body fluid of an infected person; by touching clothes or bedding used by someone with monkeypox; or by breathing in the virus during close face-to-face contact. The virus can spread from the time symptoms start

until the rash has fully healed and healthy skin has formed. This can take several weeks.

NIH played a key role in developing and testing vaccines that are now being used to prevent monkeypox infections. Medicines approved to fight similar viruses are now being tested or used to treat monkeypox. NIH continues to support research to better understand, diagnose, treat, and prevent this disease.

Learn more at www.niaid.nih.gov/diseases-conditions/monkeypox. ■



Featured Website

Science Education: Biomedical Imaging & Bioengineering

www.nibib.nih.gov/science-education

Feed your curiosity and learn about the technical side of science! Download an app and watch short videos that show how medical

scans work. Videos offer advice for future scientists, too. You can also find out how bioengineers improve people's lives, and more.

The screenshot shows the NIH Science Education website for Biomedical Imaging & Bioengineering. The top navigation bar includes links for NIH Home, Research Funding, COVID-19 @ NIBIB, Laws @ NIBIB, Training & Careers, Science Education, News Events, and About NIBIB. A search bar and social media sharing icons are also present. The main content area is titled 'Science Education' and features a section for 'Science Education Topics' with links to Artificial Intelligence (AI), Biomaterials, Sensors, Telehealth, and Drug Delivery Systems. Below this are sections for 'Medical Imaging App', 'Surgery of the Future', and 'Round 1: Rehabilitation Engineering'. A sidebar on the right shows a 'Game: Want to be a Bioengineer?' and a 'Want to be a Bioengineer?' button.

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