# NIII News in Health

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## **Get Active Together**

### Social Support Can Help Keep You Moving

Physical activity has many benefits. Walking, running, biking, swimming, lifting weights, playing sports, and moving more can add years to your life. Physical activity can improve your health, mood, and energy levels. But sometimes, the inspiration to get moving may be lacking. That's when friends, family, and other social connections can help.

Research has shown that connecting with others, called social support, can help us get active and make changes to improve

our health. Other people can help us start, continue, or increase how much we move. They can also help us make physical activity a habit.

"We still have a lot to learn about the different effects that social support can provide. But it's long been recognized that people who have greater social support tend to be more physically active," says Dr. Elise Rice, an NIH expert in behavioral and social science. "There are many different types of social support."

Social support doesn't only include people you already know. It can include groups that help get you moving, like walking or hiking clubs. It can also mean going to exercise classes, whether in person or online. There are even social media communities that provide social support for exercise.

Social support can help people



of all ages and abilities get more physical activity, even those with chronic (long-lasting) health problems.

The More the Merrier • Social support can make physical activity more fun and inviting. And being active is an important goal for just about everyone.

Regular physical activity can reduce the risk of serious health conditions. These include heart disease, stroke, diabetes, and cancer. Activity can boost brain health, improve sleep, and more.

Yet most American adults do not get the recommended amounts of physical activity. That's at least two and a half hours of moderate activity, such as brisk walking, each week. Muscle-strengthening activities, like lifting weights, are also recommended at least twice a week.

Getting in that much activity might seem challenging. "But really, any amount of physical activity is better than none," says Dr. Laurie Friedman Donze, a clinical psychologist at NIH who oversees heart health research programs. "Even short bursts of activity throughout the day can be helpful, like 5 or 10 minutes at a time."

There are many ways that friends and others can help you get and stay active. "Companionship is part

of it," Donze explains. "Being active with someone can make physical activity more enjoyable. It can provide encouragement that keeps you going. And research has found that social support can increase self-efficacy, which is the feeling that you can do something and be successful."

Finding physical activity you enjoy is often key to success, Donze says, "Because if you don't enjoy it, it'll be hard to make it into a daily or weekly habit."

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Plan Together • Making a plan with someone and sticking to it can be especially helpful. Agree to meet at certain times to get active together. Or agree to check in with each other regularly at specific times. You can share successes and struggles.

"If you make a plan to be active with a friend or family member, you're more likely to keep that commitment. You'll meet with them as promised," Donze says. "It helps keep you accountable."

Research shows that interacting with others can also help you to set and meet goals. People can help each other be physically active even if they're not exercising together.

"They can share information about important resources, like good exercise classes or nice places to walk or hike," Donze says.

And it can help if you make it fun. One NIH-supported study found that a game-based approach helped people get active after hospital discharge. Study participants wore a step-tracking device. They received game points and positive feedback for meeting step goals. Each also chose a supportive partner, like a friend or family member, to

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Office of Communications & Public Liaison Building 31, Room 5B52 Bethesda, MD 20892-2094 email: nihnewsinhealth@od.nih.gov phone: 301-451-8224 help keep them accountable. The partners received email updates on participants' progress. They also provided encouragement.

By the end of 12 weeks, people who had higher social engagement had a significant increase in daily steps. A follow-up study is underway to see if an online coach can boost activity even more.

Overcoming Obstacles • "Certain groups of people have specific barriers that can keep them from getting active," Rice explains. "For instance, older adults who've had a major health event like a heart attack may have anxiety or concerns about being physically active. Yet activity is so important for their health and recovery."

Some researchers have been studying how mindful practices, like tai chi, can help people with chronic conditions get active. Tai chi is an ancient mind-body practice. It involves certain postures and gentle movements. It often emphasizes breathing patterns, mental focus, and relaxation.

A team led by Dr. Gloria Y. Yeh at Beth Israel Deaconess Medical Center developed and tested different tai chi programs and classes. Their goal was to encourage physical activity in people with heart or lung diseases.

The team learned that people with serious health conditions often have worries that keep them from getting active. "They may avoid going to the gym because they feel embarrassed that they're not able to do what other people can do," Yeh says. "Or they may get short of breath very quickly, which can cause fear and anxiety."

But Yeh and others found that being part of a group can have a positive impact. "There's something powerful about the shared experience. They see others who have a similar medical issue who are now able to exercise. It sets an example: If they can do it, I can do that too," Yeh explains. "The mindful movement classes are really about taking things in small steps, doing what you can to foster the self-confidence to do more."

There are plenty of ways that social connections can help us get moving. But it's also true that social ties are important in their own right.

"Social support in and of itself is really important and essential to health and well-being," Rice says. See the Wise Choices box for active ways to connect with others.



# Wise Choices Get Moving With

Get Moving With Others

- Build your network. Find a group for people with shared interests, like a walking, hiking, dancing, or biking club.
- Make a shared routine. Commit to a walking schedule with a neighbor, family member, or friend.
- Be accountable. Share your physical activity goals with people you trust. Ask for their support.
- Take a class. Try a yoga, tai chi, or fitness class with a friend. You can even take a virtual class online with a friend in another town.
- Join a team. Look for local softball, soccer, or other sports teams.
- Family activity. Join your kids for a bike ride or throw a ball around before starting on homework or chores.
- Get dancing. Go to a local dance, take dance classes, or dance with family at home.
- Move more at work. Join worksite wellness and walking groups.



For more about social support and physical activity, see "Links" in the online article: newsinhealth.nih.gov/2024/05/get-active-together

# The Fungus Among Us

### Recognizing and Treating Fungal Infections

Bacteria and viruses are well-known causes of illness. But did you know that certain types of fungi can also make you sick? Most fungi are harmless to people. We even eat some, like mushrooms. But some fungi can cause skin problems, lung infections, and other diseases.

Fungi typically live in soil and on plants. But they can also thrive indoors. They can float through the air just like other germs.

"We're breathing in fungi every day," says Dr. David Andes, an infectious disease researcher at the University of Wisconsin, Madison.

Illnesses caused by fungi are much less common than those caused by other germs. And most are mild. Examples include skin infections like ringworm and athlete's foot. But a few types of fungal infections can be deadly. Fungi that get into the lungs, blood, or brain are especially dangerous.

Anyone can get a fungal infection. But people who have a weakened immune system are at much higher risk for infections that could become serious (see the Wise Choices box).

Diagnosing a fungal infection inside the body can be tricky. "Many symptoms aren't specific to a fungus or a virus or bacteria," Andes explains. "So it can be very hard to tell them apart."

Symptoms of a serious fungal infection can include a fever, cough, trouble breathing, chills, headache, chest pain, and feeling extremely tired.

If your health care provider suspects a fungal infection, they may order blood or urine tests, or images



#### Immune System

The body's defenses against invading viruses, bacteria, and other microscopic threats.



of the lungs. "But these tests can still miss a lot of fungal infections," says Andes.

Currently, there are few antifungal drugs available to treat serious infections. "And the ones that are available tend to have a lot of side effects." Andes explains.

This is because fungal cells are similar in many ways to human cells. "So it's very hard to find an antifungal that's able to kill the fungus without also hurting human cells," he says.

NIH-funded researchers are working on developing new antifungal drugs with fewer side effects. Many types of bacteria produce compounds that naturally kill fungi.

Andes and his lab have been testing compounds made by bacteria that live in other animals. All animals have helpful bacteria living inside them. If the compounds these bacteria make don't harm the animals they live in, they may be

good starting points for creating new antifungal drugs.

Andes' team recently found one such compound in a marine animal called a sea squirt. They've tested the compound, called turbinmicin, on human cells.

"So far, we've found that it can kill many fungi that current therapies don't work against. And it's not toxic to human cells," Andes says.

Researchers are also using modern technology to understand how older antifungal drugs work, so they can be modified to be safer and more effective. For now, given the limited treatment options, it's best to spot and treat a fungal infection as early as possible.

"If you're being treated for a virus or bacteria and you're not getting better, that might indicate it's time to 'think fungus," Andes says.



Certain people have a higher chance of getting a fungal infection, including:

- People living with HIV/AIDS.
- People who have had an organ transplant.
- People being treated for cancer.
- People staying in the hospital for certain procedures.
- People who have had a stemcell transplant for any medical condition.
- People taking medicines that weaken the immune system.

Adapted from the Centers for Disease Control (CDC).



For more about fungal infections, see "Links" in the online article: newsinhealth.nih.gov/2024/05/fungus-among-us



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

### **Benefits of Counseling During Pregnancy**

Pregnant women who have anxiety before childbirth are at increased risk for mental health concerns after the baby is born. Anxiety during pregnancy is more common in areas where mental health resources are scarce. A recent study showed that counseling given by non-specialists could help.

The study enrolled more than 750 pregnant women in Pakistan. All the women had symptoms of anxiety but not depression at the start.

About half received routine medical

care. The rest received at least six counseling sessions designed to treat anxiety.

The counselors had college-level degrees in psychology but no clinical experience. The sessions taught women to replace anxious thoughts with helpful thoughts and behaviors.

By six weeks after childbirth, only 9% of the women who received counseling had moderate-to-severe anxiety. This compares to 27% in the routine care group. And only 12% of women who got counseling had an episode of major depression. In contrast, 41% in the other group had a depressive episode.

"In low-resource settings, it can be challenging for women to access mental health care due to a global shortage of trained mental health specialists," says Dr. Joshua A. Gordon, director of NIH's National Institute of Mental Health. "This study shows that non-specialists could help to fill this gap, providing care to more women during this critical period."

### Take Care of Your Voice

Most people have a distinctive voice. We can usually recognize people by their voice even if we can't see them. But many people don't think much about their own voice until something goes wrong.

Signs of voice problems can include having a hoarse or raspy voice or an achy throat. It may feel hard to talk. Or your voice may suddenly sound deeper. Another sign of trouble is repeated clearing of your throat. Or you may lose your ability to hit high notes while singing.

Voice problems can arise if you've been talking a lot or loudly. Teachers are especially at risk. Voice trouble can also arise from colds or other infections that affect breathing. Acid reflux, or heartburn, can sometimes harm the voice, too. A more serious cause is cancer in the throat—specifically in the larynx, or voice box.

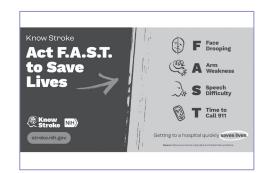
Many voice issues resolve on their own over time. Most difficulties can improve by treating the underlying cause. Surgery or behavioral treatments are sometimes needed. The good news is that you can take steps to protect your voice and avoid many problems. It helps to stay hydrated. Drink plenty of water. Use a humidifier in your home, especially if you live in a dry climate. Maintain a healthy lifestyle. Don't smoke, and avoid second-hand smoke.

To learn more about the voice and related NIH-supported research, visit www.nidcd.nih.gov/health/taking-care-your-voice. ■



stroke.nih.gov

Stroke is a leading cause of death in the U.S. Spotting the signs and getting treatment quickly can save lives and reduce disability. Signs of stroke can include face drooping, weakness on one side, speech difficulty, sudden severe headache, and sudden trouble seeing and walking. If you see these signs, call 911. Stroke is a medical emergency.



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