

# NIH News in Health

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**Inside News:** 3 Restless Legs Syndrome 4 ASD Screening App 4 Lyme Disease 4 Noisy Planet

## Step It Up! Get Active for Your Health

It's easy to sit more than you should. Many people sit at desks during the day, where we're inactive for long periods of time. Moving more and sitting less can have major health benefits. Getting regular physical activity is one of the best things you can do for your health.

Experts recommend adults get at least 150 minutes (two and a half hours) of moderate physical activity a week. That means doing activities that get your heart beating faster.

If you do more intense exercise like running, aim for at least 75 minutes a week. Adults should also do activities that strengthen their muscles twice a week.

But only about 20% of Americans meet these physical activity goals. The good news is that any physical activity is better than none. And getting active has both immediate and long-term benefits.

**Benefits for Everyone** • Physical activity has powerful benefits for almost everyone.

"If we could bottle up what physical activity does for us, we would probably have the most powerful pill ever developed," says Dr. John Jakicic of the University of Pittsburgh. Jakicic is an expert on physical activity and weight control.

Physical activity can help you feel and function better. It can improve



your sleep, energy level, and focus. It can help you stay at a healthy weight.

It also helps prevent many diseases, including heart and blood vessel disease, cancer, type 2 diabetes, and depression. Regular physical activity also helps those already diagnosed with these conditions. It can work immediately to reduce anxiety and lower blood pressure.

"It's been shown over many decades that physical activity is one of the most important actions that people of all ages can take to improve their health," explains Dr. Kong Chen, an NIH expert who studies how the body uses energy.

For older adults, physical activity can lower the risk of falls. It also helps reduce injuries if you do fall. It reduces the risk of dementia and improves cognition, or your ability to

learn, remember, and think. And staying fit enough to perform everyday tasks can help you live independently for longer.

Children benefit, too. Physical activity helps the body to grow and develop. Studies show that being active improves bone health for young children. It also improves brain function for older children. Experts recommend that kids ages six to 17 do one hour or more of physical activity daily.

Research shows that even pregnant women should be active. It lowers your risk of gaining too much weight during pregnancy. That can reduce your chances of developing diabetes

from pregnancy. It also helps lessen symptoms of depression after giving birth.

In short, being physically active is recommended for nearly everyone.

**How to Move More** • Physical activity doesn't mean you have to go to the gym. Getting more active can include simple things like carrying your groceries or taking the stairs instead of the elevator.

*continued on page 2*

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*continued from page 1*

“People mistakenly think that you have to do it a certain way,” says Jakicic. “That you have to get your heart rate into a certain zone, you have to work really, really hard, and you have to go to a special facility and wear special clothes.” But little choices to be more active can still have big effects.

Meeting the 150-minute goal may seem overwhelming. But you can start with a few minutes at a time.

“If time is a barrier, you can still gain benefits by breaking your exercise sessions into smaller periods of time,” says Jakicic.

For example, you could take three 10-minute walks throughout the day to meet a 30-minute goal.

Recent research suggests you can benefit from even a couple of minutes of activity. Every minute counts when it comes to movement.

**A Step in the Right Direction •**

Walking is an easy way to get moving. But some places make that easier than others. Studies have found that your neighborhood can affect how active you are. Scientists have asked what makes a neighborhood “walkable.”

“We found that things like having destinations close by to where you live certainly encourages more walking,” says Dr. Brian Saelens of the University of Washington and Seattle Children’s Research Institute. People are more likely to walk to a nearby store, for example.

Saelens’ team studies how environment influences physical activity and eating.

“Walkable neighborhoods also have more connected street networks,” he says, “so it’s easy to get from point A to point B without taking a long route around.”

His research also suggests that children are more physically active when they live near parks and playgrounds. For tips on making your neighborhood healthier and safer, visit [go.usa.gov/x6bBZ](http://go.usa.gov/x6bBZ).

**Strategies to Get Moving •**

Knowing you should be more active and doing it are two different things. Studies have found that the approaches that work vary from person to person.

“One solution that may work for one person may not work for others,” notes Chen.

Some find that using wearable devices or phone apps to track progress can be motivating. Other people may benefit from joining a group that does physical activity together.

Making physical activity social can make it more fun and feel less like a chore. Try to find someone you enjoy being active with. That can be particularly important for kids, who are more likely to be active with others.

Parents also play a key role in keeping their kids active. “Parents need to model being active and provide opportunities for activity,” Saelens says. Ask your child to take a walk with you. Even if they don’t come, you’re modeling the behavior. If low energy is keeping you from

**Wise Choices  
Get Moving!**

Here are some tips for making your day more active:

- Set specific goals for your physical activity. This increases the likelihood that you’ll meet them.
- Take the stairs instead of the elevator.
- Park your car at the far end of the street or parking lot.
- Make your screen time more active. Set up your space so you can walk on a treadmill while watching TV or stand when using the computer.
- Try an online exercise class to stay active from home.
- Set an alarm to go off every hour as a reminder to move around for a minute or two.
- Have small weights in your office or around your home for doing arm exercises.
- Take a walk on your lunch breaks. Or have “walking meetings” with colleagues at work.

being active, schedule exercise for a time of day when you have the most energy. Tell yourself that physical activity will increase your energy level. It usually does.

So, find what works for you. It could be riding bikes with a friend, going out dancing, or taking a mid-day stroll.

“Any activity is better than no activity,” says Jakicic. “Don’t look for the magic bullet. Look for what works in your lifestyle, look for what works for you, and then try to build on that every day.”

For more tips on getting physical activity, see the Wise Choices box. ■

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**Web  
Links**

For more about physical activity and health, see “Links” in the online article: [newsinhealth.nih.gov/2021/07/step-it-up](http://newsinhealth.nih.gov/2021/07/step-it-up)

# Disruptive Leg Movement?

## Managing Restless Legs Syndrome

Do you feel an overwhelming need to move your legs when sitting or lying down? Do these sensations make it hard to fall or stay asleep? These can be signs of restless legs syndrome, also known as RLS.

RLS is caused by problems with the way the nerves in the brain and body communicate with each other. These problems result in a strong, sometimes overwhelming urge to move the legs. This urge often comes with unpleasant feelings like tingling, burning, or throbbing.

Up to 7 to 10% of people in the U.S. may have RLS. Women are more likely than men to have the condition. **Genes** appear to play some role in who's at risk.

Symptoms may be mild and not interfere with daily life. But they can get worse over time. Four core symptoms define the disorder, explains Dr. Christopher Earley, a nervous system specialist at Johns Hopkins University.

One is the urgent need to move the legs. Second, leg discomfort is triggered by rest, like sitting or lying down. The third is that discomfort is relieved by movement.

"People feel better as soon as they

get up and walk around," Earley says.

Fourth, symptoms get worse throughout the day, peaking in the evening and night.

Severe symptoms can affect people's everyday lives. They can particularly impact your ability to get a good night's sleep. This can, in turn, make it hard to work, drive, or do other daily activities.

Treatment for RLS depends on its severity. Certain lifestyle changes can help some people with mild to moderate symptoms (see the Wise Choices box for tips). If lifestyle changes don't help, medications may bring some relief.

The medications used for RLS affect different chemicals in the brain. It may be necessary to try different ones to see which work for you.

Drugs used to treat seizures can help rebalance the brain chemicals involved in RLS. Other drugs mimic the effect of a brain chemical called dopamine. Dopamine helps regulate movement and other functions. Certain pain medications and anti-anxiety drugs may also help.

Recent research suggests a lack of iron in the brain can trigger RLS. Doctors now often recommend iron supplements as part of treatment. Tests for iron in blood samples don't show whether the brain lacks iron. Some people with RLS have normal blood levels of iron, but still benefit from extra iron, Earley explains.

His team tested whether high doses of iron, given by IV, help people with RLS. The treatment



improved some people's symptoms—even if they didn't have low levels of iron in their blood.

High doses of iron may prevent RLS from developing, too. But first, Earley says, they need to learn how to tell who's at risk of RLS because of low iron in the brain.

For now, symptoms are the only way to diagnose RLS. If you have think you may have this condition, talk with your health care provider. They can help you find ways to get some relief. ■



### Wise Choices

#### Relieving RLS

- Cut back on caffeine and alcohol.
- Avoid tobacco.
- Try a hot bath.
- Give yourself a leg massage.
- Use a heating pad or ice pack on your legs.
- Talk with your health care provider if these changes don't help. A specialist can help you try different types of medications to reduce symptoms.



### Definitions

#### Genes

Stretches of DNA you inherit from your parents. They define features like your risk for certain diseases.



### Web Links

For more about restless legs syndrome, see "Links" in the online article: [newsinhealth.nih.gov/2021/07/disruptive-leg-movement](https://newsinhealth.nih.gov/2021/07/disruptive-leg-movement)





## Health Capsules

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

### App Helps Screen for Autism Spectrum Disorder

Researchers designed an app to help identify toddlers with autism spectrum disorder (ASD). ASD can cause problems with communication and social behaviors. Symptoms usually appear before a child turns two. But ASD can be tricky to diagnose.

The new app tracks eye movements while toddlers watch specially designed videos on a tablet or smartphone. Past studies found that toddlers with ASD tend to prefer looking at objects instead of people. The videos have people on one side

of the screen—like a man blowing bubbles or two women talking—and objects on the other. The app measures the time spent looking at each.

The research team tested the app with about 1,000 toddlers at pediatrician visits. The children were 16 to 38 months old.

Of the toddlers in the study, 40 were diagnosed with ASD. The app predicted who would be diagnosed with 90% accuracy.

Larger studies are needed to further test the app. If effective, it could

help diagnose ASD early. This allows children to get treatment earlier.

“We hope that this technology will eventually provide greater access to autism screening, which is an essential first step to intervention,” says Dr. Geraldine Dawson of Duke University. She co-led the study with Dr. Guillermo Sapiro. “Our long-term goal is to have a well-validated, easy-to-use app that providers and caregivers can download and use, either in a regular clinic or home setting.” ■

### Protect Yourself From Lyme Disease

It's peak tick weather! Ticks get more active when it's warm outside. Some carry diseases that can be passed on to you through their bite.

The most common disease ticks carry is called Lyme disease. It's a bacterial infection that can cause serious health problems.

Each year, an estimated 300,000 people in the U.S. get Lyme disease. The number of cases has risen dramatically over the last 10 years. Symptoms of Lyme disease can include fever, headache, muscle or joint pain, and extreme fatigue.

People with Lyme disease usually get an expanding red rash that can resemble a bull's-eye. If left untreated, the infection can spread and cause rashes in other parts of the body. Some people may develop nerve pain, arthritis, or heart problems. Most people fully recover when treated with antibiotics, especially when Lyme disease is diagnosed early.

The deer ticks that carry Lyme disease can be as small as a poppy seed. You might not even know you've been bitten. Preventing tick bites

is the best defense against Lyme disease. You can protect yourself and your family by using insect repellent when going places where ticks are likely to live.

After coming indoors, check your clothing and gear for ticks. Shower within two hours of coming indoors. Then conduct a full body check. Don't forget to check your hair, where ticks may be harder to spot.

To learn more about Lyme disease, visit: [www.niaid.nih.gov/diseases-conditions/lyme-disease](http://www.niaid.nih.gov/diseases-conditions/lyme-disease). ■



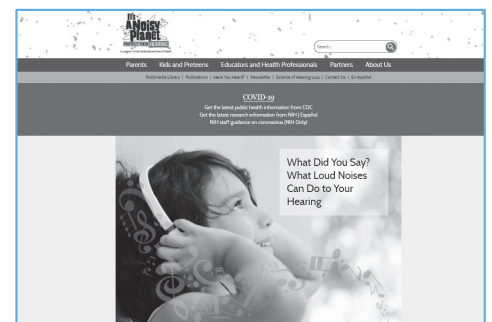
### Featured Website

#### Noisy Planet

[www.noisyplanet.nidcd.nih.gov](http://www.noisyplanet.nidcd.nih.gov)

Loud noises are everywhere. And they can permanently harm your child's hearing. But you can protect them from hearing loss

caused by loud noises. Learn the healthy habits you can teach your kids for a lifetime of good hearing.



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