

Here's the plane truth

SOME TIPS FOR STAYING HEALTHY WHEN YOU FLY.

By Michael Merschel
AMERICAN HEART ASSOCIATION
NEWS

Whether your vacation plans involve a romantic getaway to a faraway locale or just a visit with the grandkids, odds are an airplane will be involved.

For the most part, planes are a great way to go, health experts say.

"Overall, it's a very safe mode of transportation," said Dr. Leigh Speicher, an aerospace medicine specialist who is president of the Civil Aviation Medical Association.

But commercial air travel does come with some health baggage. Issues range from simple stress to "complex physiologic changes occurring in the setting of air travel that can affect the heart, the blood vessels and the brain-heart axis," said Dr. Laurence Sperling, the Katz Professor in Preventive Cardiology at Emory University School of Medicine in Atlanta.

Here's what the doctors say you can do to stay grounded in health before you're cleared for departure.

BEWARE OF THE AIR?

In the jet-travel anthem "Come Fly With Me," Frank Sinatra sang that once you're up there, where the air is rarefied, you can just glide, starry-eyed. But that rarefied air can pose a health challenge for some.

On commercial flights, cabin air is usually pressurized to the equivalent of around 6,000 to 8,000 feet in altitude, according to the Centers for Disease Control and Prevention. That's roughly the elevation of Estes Park, Colo., or Mount Olympus in Washington, and it means passengers are inhaling less oxygen than they might normally.

That pressurized air can also be dry — around 5% to 25% relative humidity, according to a research review published in *Clinical Cardiology* in 2017 about air travel's cardiovascular effects. Sperling, a preventive cardiologist

who founded the Emory Center for Heart Disease Prevention, was senior author of that review.

Speicher, who started piloting planes as a teenager, said most healthy people will be fine breathing the cabin air. But the CDC says the lower pressure can exacerbate problems for people with anemia, underlying lung issues, cerebrovascular disease such as stroke or other conditions that require supplemental oxygen. The *Clinical Cardiology* review adds heart disease and heart failure, where the heart can't pump efficiently.

If you have any concerns about whether it's safe for you to fly, ask a doctor, Speicher said.

"Your best resource to talk to is your own primary care provider," she said. "Or, if you've had a recent heart attack or a stroke, it might be the specialist who's cared for you."

The lower air pressure in the cabin also causes gas trapped inside the body to expand. That can affect someone who has had bypass surgery within the past 10 days, the *Clinical Cardiology* review said.

Expanding air inside the body also can lead to abdominal pain, sinus pain or airplane ear, Speicher said. The CDC says decongestants can help with ear and sinus symptoms. But because decongestants can raise blood pressure, they should be used for the shortest duration possible or avoided altogether in people with severe or uncontrolled high blood pressure, according to guidelines from the American Heart Association and American College of Cardiology.

FLYING DRY

The low humidity inside a plane can lead to problems such as dry eye or a cough, Speicher said. To combat dehydration, she recommends traveling with your own water bottle, which you can fill once you clear airport security. Be careful with caffeine and alcohol, she said, both of which can be dehydrating.

The air aboard modern planes is filtered and "cleaner than most of our homes and buildings that we're in," Speicher said. So when

it comes to airborne viruses and bacteria, "it's not like you're being exposed to everyone in the whole plane."

But you can still be exposed to germs from the people around you, she said, and if you're sick, you can expose them as well.

"I'm not at the point where I would say, 'Everyone needs to wear a mask for every flight,'" she said.

But in case you end up next to somebody who is coughing and not wearing a mask themselves, "I think it's lovely to have one on hand."

BLOOD CLOT RISKS

The long periods of immobility that come with air travel can elevate the risk for deep vein thrombosis — clots that begin in large veins, often in a leg. If a clot travels to the lungs, it can be fatal.

Such clots are rare, but Speicher and Sperling both recommend using compression socks on longer flights.

Stay well-hydrated, Sperling said, and keep blood flowing by not crossing your legs and by flexing your leg muscles while seated, or "get up and walk in the aisle."

But don't loiter. Turbulence can strike without warning, Speicher said. So when you're seated, buckle up, she said.

"It'll save you from injury," she said.

STRESSFUL? YES

Air travel can be frustrating, to put it mildly.

"It's a very stressful time for some people," Speicher said.

And that can affect mental health.

So "pack your patience," she

said. Try to be understanding of your fellow passengers, and listen to the instructions you're given.

"The cabin crew and the pilots are trying to do their job," she said. "They're trying to get everyone there safely."

Nervous fliers should "do the things that help you stay calm in regular life," such as deep breathing, meditation or listening to music, Speicher said.

"Travel with someone who centers you and helps you feel safe," she said.

Also avoid alcohol, she said. In addition to being dehydrating, it "can compound all the issues going on, instead of calming things down."

PRE-FLIGHT PREP

Sperling, who has been on the receiving end of several "Is there a doctor on board?" calls to help people when he's flown, emphasized the importance of checking with your health care team to make sure you're ready to fly.

"The physical stress of air travel should not be underestimated," he said. "For many people, it can be the most significant stress test they've had in days, weeks, months or that year."

It takes effort to haul luggage through the airport or even just wait in line.

"So it's not uncommon for people to unmask some underlying health conditions as they're navigating the stress of air travel," he said.

If you're cleared to fly, Sperling said, make plans for keeping up with your regular medications. Keep them in your carry-on luggage.

"It's really helpful for a person

to have a list of their medications, just to be able to share with whoever is trying to help," he said.

People with heart rhythm disorders should carry a copy of a baseline electrocardiogram reading — you can take a photo and store it on your phone, Sperling said. People with implanted devices such as pacemakers or defibrillators should carry the device's card with them.

Overseas travelers should make sure they are up to date on vaccinations. Many hospitals have travel specialists who can help.

Keep in mind basic needs as well, Speicher said.

"I recommend having some snacks or food with you in case there are delays," she said.

DON'T SKIMP ON SLEEP

Travel can interfere with sleep, which is considered essential for heart health.

Adjusting to a new time zone is trickiest when traveling east, Speicher said.

"You just stay up a bit later when you travel west," she said.

Her simplest advice is to get exposure to mid-morning light to reset your body's internal clock when you travel east.

"It's great to get sleep where you can," she said.

But be careful with alcohol, which might make you sleepy but can interfere with staying asleep.

Sperling cautioned against taking any type of sleep aid or anti-anxiety medication that you don't take regularly.

"Stick to your routine," he suggested.

If your normal bedtime routine involves reading a book, try the same while you travel.



ADOBE STOCK IMAGES

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Healthy habits for a strong school year

By Dr. Olubunmi Ojikutu

Back-to-school season often feels like a fresh start.

It's an opportunity to pause and recharge after summer vacation. For families, that includes helping children set healthy habits and daily routines, so they are ready to learn all year long.

Sleep is important to a child's overall health and wellness. It may take some time breaking the summer sleep routine, be patient.

If getting to bed on time is a challenge, make sure kids:

- Avoid naps after 3 p.m.
- Adjust the nighttime routine to their school year bedtime. Initially it may take longer to fall asleep and/or wake up earlier, that's OK! Stick with the routine and their brain and body will adjust.

• Turn off phones and electronic devices one hour before bed.

• Stay off devices and phones if they wake up early during the transition time. Otherwise, they



Dr. Olubunmi Ojikutu.

may not fall back asleep.

A well-balanced diet is key for kids to keep them feeling good, help them stay focused and fuel their brain for a full school day.

I recommend incorporating three of the five food groups into each meal.

The five food groups are protein, fruit, vegetable, grain and dairy. Whole grains are preferred because they provide fiber, fuel for energy, growth and learning, and digest slower than refined or processed grains, thereby stabilizing blood sugar.

Sit down with your family and make a list of the healthy options your child enjoys in each of these groups, then then alternate the combination for variety.

Examples of healthy grains include whole wheat waffles, whole grain granola and whole wheat bread/crackers.

Eggs, turkey bacon, peanut butter, lean meats and low-fat Greek yogurt (preferably less than 12 grams of sugar per serving) are excellent protein options.

Fresh fruit is always a healthy choice. And, if you slice it in advance, it's always ready to grab and enjoy.

To incorporate vegetables, select any vegetable your child likes and aim to serve it in the most natural state.

To help increase intake, think about adding veggies such as cauliflower or avocado to smoothies.

Good choices in dairy are skim or 1% milk, nonfat yogurts (preferably less than 12 grams of sugar per serving) or low-fat Greek yogurt (preferable less than 12 grams of sugar per serving).

It's important to help kids get and stay organized. I encourage you to work together, as a family, to create a routine everyone can agree on.

For younger children or those with special needs, fill in the details with pictures and allow children to customize their own schedule with colors and stickers is a fun project. A written schedule with the essentials works well for older kids.

I suggest breaking the schedule into four sections — before school, school, after school and wind-down. Each section should include the time and tasks that need to be completed. Here is a sample:

- Before school, 7 a.m. to 8 a.m.: Brush teeth, shower, dress, eat breakfast, leave home
- School, 8:45 a.m. to 2:30 p.m.
- After school, 3 p.m. to 7 p.m.: activities, homework, non-screen play, family meal, zero to two hours screen time

- Wind-down, 7 p.m. to 8:30 p.m.: prep for school tomorrow, shower, quiet time, bedtime. Modify the schedule as needed, but the most important thing is that you stick to the schedule to create the routine.

With everyone back at school, it's a great time to have a conversation with children that germs are everywhere, even though we can't see them.

Remind them to avoid putting their hands in their mouth and to wash hands before eating, after using the bathroom, after sneezing, coughing or blowing their nose.

If soap and water are not available, hand sanitizer is a great alternative.

By following this advice, your family can continue to have a happy, healthy and productive school year.

Dr. Olubunmi Ojikutu is chair of the Department of Pediatrics at Reading Hospital.