



# Preemptive Strikes

Leading doctors reveal the stroke prevention tips they use in treating their patients—and themselves

BY ORLY AVITZUR, M.D.

**M**ark Victor had just finished a trombone rehearsal with his county symphony orchestra when he began to feel numbness in his face and left arm. The episode lasted only 10 minutes. But Victor became increasingly scared over the next two weeks when he experienced four more attacks. After a battery of tests, doctors discovered the cause: a blocked artery in the brain. When his neurologist warned that his current lifestyle was leading toward a stroke, this 50-year-old father of two knew he had to

make some changes. Now, a year later, Victor is 72 pounds lighter and no longer suffers from sleep apnea or high blood pressure.

Stroke, the leading cause of disability and the third-leading cause of death in the U.S., strikes 700,000 Americans each year—and can hit any of us. “All people have risk for stroke,” says Harold P. Adams, M.D., director of the University of Iowa’s division of cerebrovascular disorders.

While some of these risks are beyond our control—family history, age, race, and gender—there are things we can do right now to

## STROKE STATS

**700,000**  
Americans suffer strokes each year

**EVERY 45 SECONDS,**  
someone in the U.S. has a stroke

**EVERY 3 MINUTES,**  
someone in the U.S. dies of a stroke

lessen the odds of having a stroke.

To find out what works best, we asked leading stroke specialists from around the country to share their expertise. Here's what they recommend to their patients and what they themselves do to stay healthy.

## Learn Stroke's Warning Signs

Dr. Adams, former chair of the American Heart Association's stroke council, explains that the warning symptoms of stroke tend to be brief episodes that come on suddenly. During these episodes, he says, you could experience the following symptoms: "slurred or incomprehensible speech; loss of vision in one or both eyes; severe imbalance or spinning; an unusually severe headache; a weakness, numbness, or clumsiness of a body part such as the face, arm, or leg."

## Know Your Numbers

Victor's neurologist, Philip B. Gorelick, M.D., advises patients to get involved in their own care. "Specifically," says Dr. Gorelick, director of the Center for Stroke Research at the University of Illinois College of Medicine in



### DOCTOR'S ORDERS: ASK QUESTIONS

Here are the questions that stroke expert Philip Gorelick, M.D., suggests you ask your own doctor:

- What's my risk of having a stroke?
- What can I do to prevent a stroke?
- Should I be taking medication—to reduce blood pressure, to lower cholesterol level, or to prevent platelets from clotting?
- Am I overweight?
- What options are available to help me stop smoking?
- What are the warning signs of stroke?
- What should I do if I'm experiencing stroke symptoms?

Chicago, "patients should know their systolic and diastolic blood pressure, cholesterol level, blood sugar level, weight, daily caloric intake, and number of minutes that they exercise each day."

These numbers are meaningful because patients are at higher risk for stroke if they are overweight or have high blood pressure, diabetes, or elevated cholesterol levels.

## Change Your Diet

Experts agree that a healthy diet can go a long way toward improving a multitude of conditions.

Dr. Gorelick plans his meals around fish, fruits, and vegetables. To keep the amount of food he eats to a reasonable level, he uses a small salad plate at dinner. For lunch on the go, he stops at Subway for sandwiches low in fat and calories.

Stroke specialist Kelly D. Flemming, M.D., assistant professor of neurology at the Mayo Clinic in Rochester, Minn., didn't realize how quickly snacks could add up until she began to track her intake with an online calculator that counted calories and percentages of both protein and fat. "Hidden sources of

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## ARE YOU AT RISK FOR STROKE?

### UNTREATABLE RISK FACTORS

- AGE
- GENETICS
- MALE GENDER
- ETHNIC ORIGIN
- PRIOR STROKE

### TREATABLE RISK FACTORS

- HIGH BLOOD PRESSURE
- HIGH CHOLESTEROL
- HEART DISEASE
- OBESITY
- INACTIVE LIFESTYLE
- DIABETES

calories—soft drinks, salad dressings, mocha lattes—can sabotage even those most committed to healthy eating,” she says.

### Get Active—and Make It Fun!

Every neurologist we interviewed works out regularly. It’s a great way to stay fit and to reduce stress.

Even if you have a physical limitation, there should be a way to exercise. Although Dr. Gorelick wore out his knees playing intercollegiate soccer, he is able to engage in low-impact exercise, using an elliptical training machine, lifting light weights, and doing calisthenics three or four times per week.

“I practice what I preach,” says Dr. Adams, who walks to and from work and has cycled more than 1,400 miles this year.

A word of caution: If you have already had a stroke, check with your doctor before starting an exercise program.

### Stop Smoking

The relative risk of stroke in heavy smokers (more than two packs a day) is twice that of light smokers (less than half a pack per day), according to the landmark Framingham Heart

Study. The risk goes down significantly two years after you quit, and reaches the level of nonsmokers after five years.

### Ask Your Doctor about Medications

By far the most common type of stroke, known as ischemic stroke, is caused by clots forming in the arteries. Clots can form when the artery gets narrow due to the buildup of cholesterol plaque. Diabetes, smoking, high levels of “bad” cholesterol, and elevated blood pressure increase the likelihood of plaque buildup in the artery. If a cholesterol plaque breaks off, platelets in the blood stick to the artery and form a clot.

Blood-thinning agents such as aspirin help prevent the platelets from forming a clot. Cholesterol-lowering medications called statins may also stabilize the plaque from rupturing.

Strokes may also be caused by clots from the heart in certain conditions such as atrial fibrillation (an abnormal heart rhythm) and sometimes when the pumping function of the heart is poor. For such conditions, warfarin (Coumadin), a different type of blood-thinning agent than aspirin, is often used to prevent strokes.

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Experts advise patients to be honest with their physicians. Speak up if you cannot afford a medication, worry that it will give you side effects, or get confused and forget to take it. Your doctor wants to work with you to find solutions for these problems.

## Involve Your Family

Victor, the 50-year-old high school teacher who turned his lifestyle around following stroke warning signs, takes a 1½-mile jaunt every day with his wife and their two dogs. What's more, the entire family has changed their diet. Even their 13-year-old daughter and 9-year-old son traded in french fries and potato chips for low-fat, low-sodium, high-grain meals.

If you decide to modify the way you eat, you need help from those family members who do the food shopping and cooking in order to succeed, says Bernadette Boden-Albala, Ph.D., assistant professor of neurology at Columbia University Medical Center in New York City. Likewise, it is tougher to stop smoking if your spouse is still smoking at home. Do it together, or try to establish some rules prohibiting smoking around the house.

## Live Well after a Stroke

For those who have had a stroke, it's even more important to follow the experts' advice. In addition to going through rehabilitation, patients should commit to a lifelong program of preventive measures. This is easier for some than others.

One thing to watch out for, in particular, is depression. Depression is common following a stroke and, if ignored, can interfere with a good recovery.

One of Dr. Flemming's patients, Bonny Hammer, suffered a stroke at age 74 that caused weakness on her left side and problems speaking. Hammer had led an active life—fishing, boating, piano playing. “So, at first, it was quite a shock,” she says. For three months following her stroke, Hammer admits, she was very depressed.

Her mood began to improve when she became a caregiver to another patient. “When you help others, you are not so apt to think about yourself, and you quickly forget about your own troubles,” she reflects. Today, two years later, she is much improved and looking forward to the birth of her fifth great-grandchild. “My life,” she beams, “is just full.” 

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For more information about stroke, see **RESOURCE CENTRAL** on page 46.

# 911: IN CASE OF STROKE EMERGENCY

Treatment depends on rapid response to symptoms

**N**o matter how hard you work at reducing your risk, you must always be prepared for having a stroke.

Since treatment must be administered within three hours of a stroke to be effective, experts recommend that you actually practice making the 911 emergency call. Given the urgency of quick treatment, you need to know the right way to tell a 911 operator that you think someone is having a stroke.

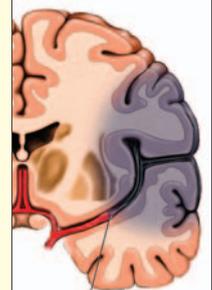
“It doesn't help to say ‘Something is wrong with my husband,’ for example,” explains stroke expert Bernadette Boden-Albala, Ph.D. “It's more effective to say, ‘I think that my husband is having a stroke.’”

She also urges you to tell the operator how long the symptoms have been there and what they are.

Emergency operators often dispatch ambulances in response to stroke calls first because of the narrow treatment window. Patients found to have ischemic stroke, which is by far the most common form of stroke and is caused by a clot that blocks an artery supplying blood to the brain, are candidates for the clot-busting drug known as tPA—but only within the three-hour window. —ORLY AVITZUR, M.D.

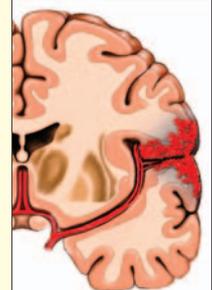
## THE TWO MAIN TYPES OF STROKE

### Ischemic Stroke



Clot stops blood supply to an area of the brain

### Hemorrhagic Stroke



Hemorrhaging blood leaks into brain tissue

## STROKE SYMPTOMS

- Sudden numbness or weakness of the face, arm, or leg (especially on one side of the body)
- Sudden confusion
- Sudden trouble speaking or understanding speech
- Sudden dizziness, trouble walking, or loss of balance or coordination
- Sudden severe headaches with no known cause