



HEALTH

Steps to Avoid an Accident

By KATIE HAFNER NOV. 3, 2014

Preventing a fall, and the resulting injuries, isn't simply a matter of being more careful. Indeed, experts who have studied falls wish that people would take measures to protect themselves much as they do against heart disease or viral infections.

Judy A. Stevens, an epidemiologist at the Centers for Disease Control and Prevention, stressed the importance of exercise. Among those who do fall, she said, "if you're in better physical condition, you're less likely to be injured."

Regular exercise classes can help, especially those that include balance drills, such as standing on one foot, or working with Bosu balls, the squishy hemispheres seen at gyms.

The regular practice of tai chi has also been found to help. Tai chi involves very slow, purposeful movements in coordination with breathing and muscle activity, which in turn affects respiration, balance, and gait.

At The Sequoias-Portola Valley, a retirement facility 35 miles south of San Francisco, 12-week tai chi programs are offered twice a year. Before and after, participants are tested for how many times they can rise from a chair without using their arms. Dr. Kati Murray, a geriatrician who is medical director of The Sequoias, said they saw marked improvement after the tai chi.

Dr. Lewis A. Lipsitz, a professor of medicine at Harvard, said he saw similar results at two facilities run by Hebrew SeniorLife, where he is vice president of academic medicine. "If only we could put tai chi in a pill," he said.

Integrating balance and strength work into daily life — standing on one foot while brushing your teeth, for instance, or simply putting one foot in front of the other — can help as well.

Several studies have shown that vitamin D, which can improve muscle strength and balance, helps reduce falls. Also, remaining appropriately hydrated, particularly on hot days or for people at risk for low blood pressure (a main cause of dizziness), is important.

People on multiple medications can be at especially high risk of falling. Psychotropic drugs such as antidepressants, antipsychotics and benzodiazepines are most clearly implicated in falls. Antidepressants “can directly affect your balance,” said Dr. Mary Tinetti, a geriatrician at Yale who studies falls.

Blood pressure medication, used by 70 percent of people over 70, can cause dizziness when blood pressure drops too much, and is another oft-cited culprit in falls. A study in *JAMA Internal Medicine* last April found that among older people with hypertension, the risk of serious fall injuries — fractured bones, brain injuries or dislocated joints — was significantly higher for those who took hypertension drugs than those who did not.

Given such findings, Dorothy Baker, a research scientist at the Yale School of Medicine, recommends that elderly patients discuss their drugs with their primary care physician, with an eye toward reducing dosages or eliminating medications that might not be necessary.

Sleep medication, for instance, can cause a wobbly gait. “Instead of taking sleeping pills, people can drink warm milk, or listen to talking books or soft music,” said Patricia Quigley, a fall prevention expert at the James A. Haley Veterans Affairs hospital in Tampa, Fla. And for patients taking diuretics for disorders such as high blood pressure and heart failure, Dr. Quigley said, they should take the medication during the day rather than in the evening, to avoid unnecessary nighttime trips to the bathroom.

Reducing the number of tripping and slipping hazards at home also helps prevent falls. Scatter rugs should be removed, for instance, and floors and stairways kept clear of obvious threats like shoes and toys.

Also, people should have their eyes checked at least once a year and wear single-vision glasses while out on walks, as bifocal and progressive lenses can cause missteps, according to a study published in the *British Medical Journal* in 2010.

Dr. Tinetti warned that excessive tentativeness can actually increase the risk of falling. “People who are more cautious cut down on their activity,” she said, “which makes their balance worse, their strength worse, and reflexes that prevent falls worse.”

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