# Newsletter

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## **Balance of Power**

### With exercise, older adults can reduce the risk of falling injuries

By: Karen Shade, Tulsa World 8/31/06

Most adults figure they've acquired everything they need to know about balance by the time they've started running between the furniture on toddler's legs. The coordination lesson, however, doesn't end with winning a round of hopscotch. Balance becomes a whole new challenge as people age and when the simple act of standing becomes an issue. But some forms of exercise could help prevent injuries resulting from a loss of balance.

For Glenn Wright, bending over to lift a few grocery bags off the ground became dangerous. A hip problem has limited his mobility, and he found himself beginning to lose his balance doing things that he previously never thought about. "I'm 69, so we lose a little bit of that as we get older," he said during a break from his Power Play workout at St. John Siegfried Health Center. Wright, flushed after several minutes of balancing his weight horizontally on a stability ball while alternately raising his legs backward, is one of Daniel Smejkal's students in the course aimed at fine-tuning people's coordination.

The class goes through motions using weighted sticks, bosu balls (which actually look like half a ball), mats and weights to improve agility. "This is really, really preventive," said Gwen Moudry, exercise physiologist at the center, as she watched the class. "These folks in this class are probably at a relatively low risk of falling because they're thinking preventively and honing in on those skills. It's just like everything else. If you don't use it, you lose it."

The class began about three years ago as an alternative to the center's pool therapy classes. Functional training uses easily attainable equipment and easily transferrable exercises, which people can practice in their homes.

Balance becomes an issue for older adults for a variety of reasons. The inner ear, which is filled with fluid gauging equilibrium, can be affected by disease and illness. Or a weak immune system can lead to blockage in the inner ear, causing dizziness, Moudry said. Sometimes, loss of vision or medication plays a factor in the body's ability to find it's center of gravity. Strengthening the body's ability to correct itself when balance is lost is a good way to counter the problem, she said.

Balance is also a concern with conditions such as multiple sclerosis, osteoporosis, arthritis, Parkinson's disease and even heart disease. "Other than cardiovascular disease, the older you get, your greatest risk is falling," and for an elderly person who has fractured a hip bone, the chance of dying within the year is about 30 percent, Moudry said.

According to the Centers for Disease Control's National Center for Injury Prevention and Control Web site, www.cdc.gov/ncipc, more than 60 percent of adults 75 and older die from falls, and nearly 13,000 people 65 and older died from fall-related injuries in 2002. And lack of movement affects general health and mental wellbeing, she said. "You're fear factor just grows and grows, and you continually avoid more and more activities. The more activities you avoid, the less skills you have," Moudry said. "They just stop moving, so they don't play with their grandchildren. Some of them stop doing their grocery shopping, stop going to church, because the risk of getting up one or two steps is

too hard. "If they don't go to church and they don't keep shopping, then you're housebound, right? It doesn't take very long from there until you're in a chair," she said.

At one stage in the class, Wright and the others, mostly seniors, balance on top of bosu balls while they toss a smaller ball back and forth with a partner, simulating a game they might play with grandchildren. Smejkal said the exercises are based on real-life activities, such as walking down stairs and pulling yourself out of a car or bath tub. And it focuses on the way people live their lives. People naturally talk and turn their heads while they walk with others. With age, however, people may be forced to concentrate more fully on the walking aspect.

Functional training works in motion and to people's different fitness levels. It also works to all ages, he said. "Obviously, it's a little more identified in the elderly population, but I've had young people take my class and be humbled by it," Smejkal said. "I can maybe run a marathon and lift heavy weights, but standing on one leg, I'm challenged. What it really boils down to is the intelligence of the muscles to work together."

Balance training is good at any age, but it is especially important for people beginning at the age of 50. "Older adults, even from 50 years and up become overly cautious. Why? Because their friends have fallen and hurt themselves, and they're not going to take that risk," Moudry said. "We're opening the door and saying we're going to set up a safe environment and let you take some risk so you can progress."

Patients who already have serious health problems affecting their balance should consult with a physician before signing up for the class. A doctor may find physical therapy more appropriate along with other treatment. Wright said he is unable to do some of the exercises in the class, but he is a regular. The class, taught weekly on Tuesday and Thursday mornings, usually grows after summer.

"It's really helped me, and Daniel is really good at what he does, "Wright said. Power Play is only part of his fitness regimen, which also includes cardiovascular and strength training. Smejkal advises his other students to do the same to meet the body's other health needs and to seek out other forms of balance-focused activities such as yoga, Pilates and tai chi.

"Make no mistake about it - we're going to skip and fall out there," Smejkal said. "We live in an unstable world. All we can do is prepare for it."

## Before you begin

#### Tips for starting any exercise regimen

Seniors should focus on four types of exercise (strength, balance, stretching and endurance) to stay healthy and independent. But before starting any exercise program, older adults should speak with a doctor, especially if they are at risk for any chronic diseases (such as heart disease or diabetes) or if they smoke or are obese.

#### A few other exercise tips to keep in mind are:

- Don't hold your breath during strength exercises. This could affect your blood pressure.
- Use smooth, steady movements to bring weights into position and avoid jerking, strained or thrusting movements.
  - Breathe out as you lift or push a weight and breathe in as you relax.
- Hold onto a table or chair for balance with only one hand. As you progress, try holding on with only one fingertip.
- Next, try the exercises without holding on at all. Ask someone to watch you the first few times in case you lose your balance.

- Always warm up before stretching exercises by doing them after endurance or strength exercises or by doing some easy walking or arm-pumping first.
  - Stretch after your activities, when your muscles are warm.
  - Drink water.
  - Dress appropriately for the heat and cold.

SOURCE: National Institute on Aging