## Walk this way—Nordic style



# Nordic walking can provide health and wellness benefits for people with MS.

by Stephanie Stephens

### **Pole position**

Having the right poles is key in Nordic walking. Find out more.

An unexplained fall broke one of Tere Smith's feet before she was diagnosed with multiple sclerosis in 2013. She was frightened and reluctant to walk much, let alone exercise. "My legs just gave out," says Smith, who works as an administrative assistant in the outpatient therapy department at a Chicago-area hospital.

Among the therapists she works with is Peter Schmitt, DPT, a physical therapist and a certified Nordic walking instructor for the American Nordic Walking Association (ANWA). After Smith completed rehab, Schmitt recommended she try Nordic walking—also called pole walking—and the results were encouraging.

## Step to it. Nordic walking may have multiple benefits

## for people with MS.

**Improved stability and balance:** Poles provide two additional points of contact with the ground, and for people with MS who may have gait problems, that can help reduce falls, physical therapist Peter Schmitt, DPT, says.

**Enhanced flexibility and strength:** Gentle increases in range of motion from pole movement can help reduce pain in the back, neck and shoulders. "The sport also conditions muscles of the upper body, abdominals, back and legs," certified personal trainer Laura Jones says. In addition, it strengthens arms, adds physical therapist Nancy Mayo, PhD.

**Elevated mood and well-being:** Extensive research trumpets the benefits of exercise for better mental health, says Jones.

**New pathways in the brain:** Because of Nordic walking's repetitive motion, including arm swings, alternate pathways can be built, says Mayo. "Repetitive movement helps neuroplasticity," she says, noting that's why therapists often have clients keep practicing a task, both in stroke rehabilitation as well as in MS. And arm swing, she says, is an important component for establishing or improving gait patterns.

**Reduced spasticity in the foot:** Nordic walking, which emphasizes the need to lead with the heel and roll onto the ball of the foot, actively stretches the heel cord.

Nordic walking resembles cross-country skiing in its stride and use of two poles, but is done without snow or skis. Participants begin each step with a heel on the ground, roll forward to the ball of the foot and toe, then push off to propel forward with a longer stride than is typical for regular walking, swinging the pole in the hand opposite the leg that is moving. The sport exercises not just legs, but also shoulders and arms, and works muscles of the back and upper chest.

"When my walk gets 'wonky' and I drag my left foot—maybe because of temperature changes—I use my poles for more support and balance, better posture and a faster gait," Smith says. "Now that the weather's getting nicer, I'm really looking forward to doing long Nordic walks outside."

#### **Energy wise**

People with MS and other neurological conditions often don't get sufficient exercise, but Nordic walking is a great way for them to engage most of the muscles of the body in one enjoyable activity, says Nancy Mayo, PhD, a physical therapist and professor in the School of Physical and Occupational Therapy at McGill University in Montreal. What's more, neurological deficits often prevent people from walking at a pace that would provide significant health benefits, she adds. But Mayo's research indicates that pole walking may help them overcome obstacles to exercise.

Mayo co-authored a small study of 30 people, published in the journal **Disability and Rehabilitation** in 2012, which found Nordic walking to be 106 percent more efficient than regular walking at improving gait speed among the elderly.

Now she is lead researcher for a randomized trial currently underway that focuses on how an exercise program specifically tailored to people with MS can improve "exercise capacity"—the maximum amount of physical exertion that a person can sustain. Nordic walking is one of several types of exercise included in the program. It fits the curriculum because "it reduces the body's energy costs," says Mayo.

"[People with MS] are dealt a certain amount of energy each day, and must expend a portion on activities of daily living," Mayo says. "Evidence shows that walking is the best form of healthy exercise, but we don't want to just tell people with neurological deficits to 'take a random walk' if they walk poorly and slowly. Nordic walking is more efficient, requiring less energy, while encouraging straightness and balance."

Mayo and Schmitt aren't alone in their enthusiasm for the sport for people who live with MS. William Arthur Honer II of Lake Ann, Michigan, was diagnosed with MS in 1989 and has been Nordic walking since 2002. "The poles have a stunning impact—they just get you to move. I regularly go out with my friends for long walks," says Honer.

#### More benefits

Laura Jones, a certified personal trainer and Nordic pole walk master trainer in Whispering Pines, North Carolina, began to explore Nordic walking for people with MS after her daughter was diagnosed with the disease in 2008, and she observed people with a variety of mobility levels at a Walk MS event a short time after. Jones, Schmitt and Mayo all agree that Nordic walking could be appropriate for people with MS because, among other benefits, it helps with stability, flexibility and spasticity in the foot.

#### How to walk this way

Nordic walkers begin by grasping a pole in each hand. Fingerless "gloves" secure hands to poles. As the walker takes a step, he or she grasps the pole on the opposite side of the body until it touches the ground, then releases the grip as the pole swings behind the body, explains ANWA founder Bernd Zimmermann.

With more experience, the movement can become more refined and challenging. But even at its most basic, it's a time-efficient, total-body workout for almost anywhere and in any weather, its adherents say.

Don't confuse Nordic walking, however, with NordicTrack "skiing" exercise machines, which don't use poles and provide far less stability.

If you're ready to try Nordic walking, check first with your doctor or therapist. After getting the go-ahead, Schmitt recommends that people interested in trying the sport find a certified local instructor at **ANWA's website** to ensure correct technique. You can also purchase instructional DVDs or search for free instructional videos online.

Stephanie Stephens is a multimedia journalist specializing in health and lifestyle topics.