Creating thriving “Nordic” total body walking and pole exercise programs.

Activating seniors to walk, move and exercise safer and stronger with specially designed poles

By Tom Rutlin
Walking Magazine reveals “Why Pole Walkers are Smiling”
The reasons for the smiles...

A University of Wisconsin – Lacrosse 12-week study comparing the benefits of ordinary walking (W) to walking with poles (PW) found...

- PW group increased aerobic capacity by 9%
- PW reached target heart rate at 3.1 mph vs. 3.4 mph for the W group
- PW increased upper body endurance by 38% vs. W – no statistical change
- PW had less depression, anger, fatigue and overall better mood states than regular walkers
Some of the earliest study results...

- 23%+ Increase in energy expenditure vs. ordinary walking (Michigan State University/ACSM)
- Up to 25% reduction in ground impact forces vs. ordinary walking (UW-LaCrosse)
Study results with special populations

- VA PAD/Claudication study showed improved exercise tolerance, significantly less claudication pain and improved distance and walking speed scores.
- VA Parkinson’s Disease study showed increases perceived functional independence and quality of life in individuals with PD.
- University of Northern Colorado breast cancer study showed improved muscular endurance of the upper body in breast cancer patients following treatment.
Active Seniors have always been in the “vanguard” of pole walking.
They’ve become a very welcome alternative to traditional assistive devices!

• Seniors have frequently resisted prescriptions to begin to use canes or walkers…until they had little or no choice but to do so.

• Peggy Buchanan was a pioneer in the use of walking poles as a viable and preferable alternative to canes and walkers.
A Vista Del Monte/Westmont College pilot project with former cane and walker users* demonstrated...

- Immediate improvements in posture
- Immediate improvements in walking gait mechanics
- Improvements in stability
- A rapid shift of subjects from self-perception as “invalid” to “athlete”

*Conducted by Peggy Buchanan, MA and Professor Greg Afman, PhD with subjects averaging age 86 years old.
Circa 2004 Peggy Buchanan creates innovative pole exercise programs

- Seated total body movement/exercises
- Seated range of motion exercises
- Total body sit to stand exercises aided by poles
- Standing range of motion/flexibility and balance improving/fall reduction exercises
- Safely navigating obstacles in your ADLs
- “Pole dancing”
- “Nordic rolling” – using poles with wheelchairs
Seated and standing stretching and ROM exercises
Reaching for better health and function.
Pole assisted sit to stand, and stand to sit total body exercise...
Why are so many seniors are currently adverse to exercise...

• They’re of the pre-aerobics, post-depression, labor saving/“modern conveniences” loving generation.
• Far too many trust that pills & MDs can fix all their ills.
• They have fears that exercise will hurt rather than help them.
• “It’s too late.” They believe they’re too old to exercise. (They think exercise is for young people and athletes.)
• Too many exercise prescriptions they’ve been offered are neither senior-friendly or enjoyable!!
• Most have “tried exercise” once or twice and they just didn’t like the experience.
• Far too many are just too intimidated to even try exercise!
What far too many seniors* envision when they hear the word “exercise”...

- Panting *breathlessly*
- Sweating *profusely*
- Feeling tired and experiencing *sore muscles and joints* the next day
- Doing things that they perceive do more to put their health at risk than to improve it
- Boring time spent on exercise machines or in scheduled classes that conflict with things they need to do -- or they’d rather do.
- OR, *not* panting, sweating or getting sore... *but also not seeing the kind of results they desire either!*

*and unfortunately most other people of all ages*
Why seniors desperately need to exercise...

- Modern “labor saving” conveniences as well as their life-long aversion to exercise have made this generation of seniors perhaps the most unfit ever.
- Their quality of life, longevity, and state of health are highly dependent on remaining or becoming active.
- They greatly value their “independence”, and they will almost certainly surrender it much sooner unless they become involved in regular physical activity.
- They need to be able to draw on their internal “psychopharmacopeia” to fill the “donut hole” in their Medicare prescription coverage and lower overall medical costs.
- They need to believe there is more quality life ahead.
ACSM and AHA exercise guidelines for adults over age 65*...

- Do moderately intense aerobic exercise 30 minutes a day, five days a week – or do vigorously intense aerobic exercise 20 minutes a day, 3 days a week and...
- Do eight to 10 strength-training exercises, 10-15 repetitions of each exercise twice to three times per week and...
- If they are at risk of falling, perform balance exercises and have a physical activity plan.

How many of the seniors your work with have both the time and the motivation to follow a prescription like that??

* or adults 50-64 with chronic conditions, such as arthritis
What percentage of your residents, clients (and facility staff) currently meet these guidelines?

...and would you have the resources (trained staff, facility allocation, budget and equipment) needed to conduct enough classes if a large percentage of those you serve actually wanted to meet these exercise guidelines?
If only there were a magic pill*!

Well, of course, there isn’t! But there is a daily total body exercise prescription that can be integrated into your resident’s activities of daily life that can effectively and simultaneously meet all ACMS’s and AHA’s minimum daily requirements for physical activity for adults over age 65!

*The good news...this exercise prescription involves 2 poles – no pills... and there are no dangerous side-effects!
The Exerstride Fitness Walking and Stability for Mobility Method™ total body “Nordic walking” prescriptions...

can deliver many of the same total body health and fitness building benefits of “Nordic” (or cross-country skiing), yet any person of any age and ability who can walk (even if they currently use a cane or walker) can learn and begin to benefit from this enhanced total body version of fitness walking in very little time by combining its many health and fitness building muscle fitness building reps with every step.
30 minutes of this simple total body version of walking ... 

- Significantly increases the moderate aerobic and muscle building exercise benefits of fitness walking!
- Results in one vitally important repetition of core fitness building muscle contractions for every step taken (2,000+ steps = 2,000+ functional core fitness muscle building reps).
- One “rep per step” of muscle strength and endurance building resistance contractions benefitting many other important upper body muscles (forearm flexors, triceps, lats, pectorals, spinal erectors, multifidus, etc.
- Allows most 65+ walkers to significantly increase the number of steps the can and want to do in 30 minutes of exercise walking!
- Produces 2,000+ bone density preserving stimuli per mile
- Puts one’s entire body to safe, fitness-building “good use”
- Increases confidence, improves proprioception, oxygenates the entire body, improves balance and posture and more!
AN IMPORTANT NOTE: Not all versions of “Nordic walking”, as well as the equipment used, are by their nature well suited to senior populations. Exerstride Method™ Nordic walking as well as our poles have been specially designed in conjunction with active aging experts to be safe, natural and is designed to safely build functional fitness for people of any age or ability.

Natural “good use” EMNW “Sport” paradigm NW
## A WELLNESS VS. A SPORT PARADIGM

### “EXERSTRIDE” Method
- UPRIGHT POSTURE
- NATURAL STRIDE LENGTH
- “SOFT” FOOT PLANT
- EXTENDED ARM POLE PLANT
- EFFICIENT LIMITED ARM RANGE OF MOTION
- POLES PLANTED MORE VERTICALLY (LIFTING FORCE “MORPHS” TO PUSHING)
- INTENSITY INCREASES WITH TOTAL FORCE APPLIED

### European paradigms
- FORWARD LEANING
- LONG STRIDE LENGTH
- INCREASED GROUND IMPACT FORCES AT FOOT PLANT
- BENT ARM POLE PLANT
- ARMS PASS BEHIND BODY WITH RELEASE OF GRIP
- POLES PLANTED AT AN ANGLE (PUSHING FORCE)
- INTENSITY INCREASES WITH INCREASING TEMPO
Assessing an individual’s readiness to participate in pole exercise...

*People under medical care for chronic conditions should discuss the use of poles with their doctor or health care professional. Exerstride walking and pole exercise programs may or may not be suitable for people with these conditions:*

- Acute stages of frozen shoulder, rotator cuff dysfunction and tennis elbow (they may be limited by painful ROM and inflammation).
- Early stages of hip and knee replacements (walker or crutches may initially be more appropriate).
- Chronic conditions in middle to late onset stages resulting in moderate to severe balance and coordination problems.
- Severe rheumatoid arthritis or osteoarthritis in the finger joints affecting ability to grip handle.
- Visual disabilities caused by disease, stroke or old age.
- Severe acute cardiopulmonary conditions.
- Walker and two-cane users should begin the use poles under the direction of a physical therapist, occupational therapist or specially trained personnel.
- Severe advanced osteoporosis.
Two very senior-friendly versions of Exerstride Method Nordic walking...

Fitness walking technique

“Stability for Mobility™” Technique
“Exerstriding” is different...people of all ages and abilities just love it because...

• It’s everyone’s favorite exercise -- walking – transformed into an even more safe, fun, effective and motivating total body exercise!
• It immediately improves walking confidence, balance and posture as well as promoting a “more normal, youthful” gait.
• It significantly enhances the aerobic benefits of walking (by 25% with no change in RPE).
• It combines total body muscle conditioning resistance exercise at the same time it enhances the aerobic benefit of every step.
• It’s easy to learn, fun, social and IT FEELS GOOD!
• It “sparks” the production of mood and energy enhancing chemicals, hormones in the brain and throughout the body.
• Seniors as well as their family and friends can do this exercise whenever and where ever they like!
Professionals and facilities who serve “active agers” love it because...

- Exerstriding programs require minimal allocation of facilities space, staff time and financial investment
- This exercise program has a high buzz-building profile in the facility/community
- Striding programs “grow organically” as program participants stride happily, more healthily and proudly throughout the facility/community
- It’s both a highly effective total body aerobic/muscle conditioning exercise program and an effective fall reduction/balance/ROM enhancing program all in one!
- It creates happier, more optimistic, better quality clients and residents!
- *It rates very high on the “self-efficacy” scale!!*
And “active agers” (and even once “exercise-phobic” seniors) love it because...

- **#1 - They “love the way it makes them feel”!**
- They love the added balance/confidence and improved posture that results immediately from walking with poles!
- It allows them to walk faster, longer, and further with better posture and more normalized gait.
- It allows them to slow (and even reverse) many of what are generally considered to be the “normal effects of aging!
- It rapidly enhances their quality of life and vitality.
- It can significantly extend their independent living lifespan.
- It makes nearly all or the activities of daily life easier and more enjoyable.
- It’s a highly social activity – you can talk, talk, talk while you walk!
A few reasons why “Exerstriding” total body walkers love the way it makes them feel...

- Putting so many major muscles to good use makes them feel empowered (Not using muscles leads to the declines usually labeled the “normal effects of aging” and abusing muscles just makes them feel sore!)
- “Good use exercise” enhances physical function and overall vitality/energy
- Total body exercise maximizes body’s production of BDNF, HGH, IGF 1&2, and an entire “natural pharmacopeia” of natural mood enhancers
- Changes “invalid” mindset to “senior athlete” mindset
- It makes them feel newly empowered!
It’s incredibly adaptable to people of any age, ability or health and fitness goals

- If one can walk (even if only with the assistance of a cane or walker) one can generally learn to Exerstride in minutes.
- Poles can be used for core and upper body building sit to stand and stand to sit exercise.
- They can also be used for balance improving, proprioception sharpening exercise.
- As well as doing pole assisted stretching and ROM exercises.
- Perhaps the most profound benefit is changing the way users feel about the limits of their ability thus allowing them to slow or reverse many age markers.
Exerstrider’s senior-friendly ACTIVATOR MediSport Edition™ fitness walking poles feature...

- Extremely safe, easily adjustable telescoping design.
- Exclusive strapless ergonomic “orthotic” grip -- maximizes safety, comfort and performance
- Boot-shaped Cushiongrip™ rubber tips for fitness walking, or Bell-shaped Balance™ tip option
- Tungsten carbide tips for ice and other slippery conditions
Our Activator’s exclusive “button” locking system is extremely safe & senior and arthritis-friendly!
Our ergonomic strapless handles were designed to maximize safety and comfort. The rear flare acts as an orthotic support for the palm’s natural arch, maintaining a healthy neutral wrist alignment at all times.
Strapless vs. strapped handles...

ERGO/SC™ safety handles

Standard strapped NW handles
What can happen in the event of a fall when strapped to a pole...
Be certain to adjust poles to the proper height according to the user’s needs

Fitness walking  Stability for Mobility™ walking
How to adjust the poles to the proper length for fitness walking ...

• Slide lower section out to “MAX. STOP” markings.
• Have user hold grip with their arm forming a right angle at the elbow -- with the upper arm perpendicular and the forearm parallel to the ground.
• With the pole at an angle to the rear, allow the lower shaft to slide into the upper shaft while positioning the rubber tip so that its “heel” is even with the back of the user’s foot.
• Then turn the lower shaft until the silver stripe on it aligns with the silver stripe on the upper shaft running between the numbered holes.
• Slide the lower shaft up or down slightly until the metal button pops through the nearest hole (Note the number of the hole for future adjustment.)
• NOTE: always be certain that the metal button has snapped completely through the desired hole before using the poles.
How to adjust the poles to the proper length for Stability for Mobility™ walking

- Slide lower section out to “MAX. STOP” markings.
- To adjust them to length for use as a stability aid, position the rubber tips so they are directly under the gripping hands and so that the pole is at a 90 degree angle to the ground. (This will maximize the stability platform afforded the user.)
- Then turn the lower shaft until the silver stripe on it aligns with the silver stripe on the upper shaft running between the numbered holes.
- Slide the lower shaft up or down slightly until the metal button pops through the nearest hole (Note the number of the hole for future adjustment.)
- **NOTE:** always be certain that the metal button has snapped completely through the desired hole before using the poles.
Choosing the appropriate rubber tips...

- If the user has good balance and walking confidence – the boot-shaped *Cushiongrip™* rubber tips are recommended.
- If the user will be using the poles *primarily as a stability/balance aid*, choose the *Bell-shaped Balance™* rubber tips.
Contra lateral arm and leg movement and proper range of motion of the arms for fitness walking...

- Arms and legs move naturally in opposition.
- When Exerstriding the arms move further forward into the “handshake position” and do not move beyond the leg on the same side.
- Arm pivots in pendulum action like a “pump-handle” pivoting from the shoulder joint.
- For fitness walking the poles always remain at an angle to the.
Contra lateral arm and leg movement and proper range of motion of the arms for Stability for Mobility™ walking...

- Arms and legs still move naturally in opposition.
- Poles always planted *outside* of line of the feet and *in front of the body*
- Arms remain bent to increase the mechanical efficiency and ease of walking
- *When used primarily as a stability aid the poles should always remain vertical*
Exercise equipment “Econ 101”

@$5,000 = 1 \text{ treadmill or Nustep}^\circledR \quad @$5,000 = 92 \text{ pair of poles}
Net cost and impact comparison...

1 Exercise machine @$5k vs. 92 pr of poles @$5K

- Used by one person at a time -- when available
- Requires allocated space in your fitness facility
- An individual activity - within your exercise facility
- No vitamin D production
- Depreciating asset

- Net cost: $5K + footprint x SF costs

- Up to 93 people activated at a time -- whenever desired
- Requires no allocated space in your fitness facility
- A highly social group activity
- Socially integrated into ADLs
- Fresh air and vitamin D producing outdoor exercise
- Purchase at discounts and sold by popular demand to residents

- Zero net cost:
  (with a potential of +$1.6K - $3.2K to the bottom line.)
We can train your CCRC wellness/activities staff and give them all the tools needed to create “Zero Net Cost™ (revenue generating!), organically growing program in your facilities and communities!

Contact our customer service department if you’d like to learn more about our volume discounts and about how we can help you establish Exerstride Method™ Nordic walking revenue generating programs that can create a growth sustaining buzz, as well as creating longer term, higher quality residents!

Just call us at 1-888-285-7392 or email seniorprograms@exerstrider.com