**Can Swimming Pool Exercises Improve my Balance?**

A new [study](http://aje.oxfordjournals.org/content/180/8/830.abstract?sid=94d9f80c-c48d-41cd-88e0-2cbaa4c9e64c) published in the ***American Journal of Epidemiology*** found water-based workouts lower risk for falls.

Balance training is the most efficacious exercise to prevent falls. This study examined the associations between common sporting activities and the incidence of falls, and whether lower risks can be attributed to the superior balance of sports participants. We studied a population-based cohort of 1,667 older Australian men (mean age = 76.8 years) in the Concord Health and Ageing in Men Project (CHAMP) between 2005 and 2011. Data on incident falls were captured by 12 triannual telephone call cycles per participant and were analyzed using negative binomial regression. The length of follow-up averaged 43.8 months (median, 48 months), during which time 2,662 falls were recorded. In unadjusted models, golfers (*n* = 160; incidence rate ratio (IRR) = 0.65, 95% confidence interval (CI): 0.47, 0.89) and swimmers (*n* = 88; IRR = 0.47, 95% CI: 0.30, 0.71) had significantly lower risks of falling. After adjustment for leisure-time physical activity (LTPA), walking, lifestyle physical activity score (e.g., chores, gardening), and conventional risk factors for falling, swimming was the only activity that was associated with a protective effect (IRR = 0.67, 95% CI: 0.45, 1.00). Swimmers had significantly lower postural sway (β = −5.23 cm2, *P* < 0.05) and shorter time to complete a narrow walk test than men who took part in only lifestyle physical activities. Balance indicators were strong predictors of the incidence of falls. The IRR for swimmers was 0.71 (95% CI: 0.48, 1.06) after adding balance measures to the adjusted model.

To the best of our knowledge, this is the first study to compare the incidence rates of falling among older people by common types of sports participation. We found that swimming was the only sport associated with a substantially lower risk of falling. The results suggest that the possible benefits of swimming in reducing falls may be due in part to the effect of swimming on the swimmer's balance.

The lower incidence of falls (32%) that was associated with swimming is close to the effect size (38%) of fall prevention programs that have included highly challenging balance exercises in a sufficient dose… of a fall prevention program.

SOURCE: <https://academic.oup.com/aje/article/180/8/830/2739186?login=true>

**What is a Narrow Walk test?**

The Narrowing Beam-Walking Test (NBWT) is a performance-based clinical test designed to assess balance ability in ambulatory individuals with lower-limb impairments who may be at risk for falls (e.g. lower-limb prosthesis users). Its design facilitates an assessment of balance ability with minimal subjective interpretation (i.e. participants are either on or off the beam), while the increasing level of difficulty (i.e. decreasing beam width), renders it suitable for a broad range of ability levels and possible applications. The test requires participants to walk along a set of four beams, each narrower than the last. Further distances walked on the NBWT indicate greater balance ability and reduced fall risk.

SOURCE: <http://media.mycrowdwisdom.com.s3.us-east-1.amazonaws.com/aaop/Videos/How-To_Outcomes/NBWT.pdf>

**What is the PASE Questionnaire?**

The awareness regarding improving the physical activity of older adults has been growing among policymakers and healthcare professionals during the past few years. The evidence shows that improving older patients physical ability, lifestyle behaviors and quality of life could promote building resilience and healthy ageing.

[A physical activity](https://www.physio-pedia.com/Physical_Activity) questionnaire is a practical and widely used approach for physical activity assessment in epidemiologic investigations[[2]](https://www.physio-pedia.com/Physical_Activity_Scale_for_the_Elderly_(PASE)#cite_note-Washburn_1986-2).

Activity questionnaires have been used in studies relating physical activity to fall and [fracture](https://www.physio-pedia.com/Fracture) risk, [balance](https://www.physio-pedia.com/Balance) and [gait](https://www.physio-pedia.com/Gait) characteristics, bone density, and coronary [heart disease](https://www.physio-pedia.com/Coronary_Artery) in older people.

**PASE** was initially developed in early 90s to provide an instrument to investigate specifically older people with an age-specific physical activity questionnaire, filling what was an important need in epidemiological research at that time.

SOURCE: <https://www.physio-pedia.com/Physical_Activity_Scale_for_the_Elderly_(PASE)>

**Pool Routine** (according to a local surgeon)

So, what would be a great routine specifically designed to reduce falls that you are able to do in a pool?

Walk forward and backward 20 minutes with a pool noodle.

Walking backwards causing your brain to develop neurons to develop better balance. Remember BDNF and how exercise impacts the presence of this infrastructure supporting Neurotrophin.